# 9000 Area Planning / Documentation

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## *9000 Area Planning / Documentation*

### *9100* Emergency Notification

| | |
|---|---|
| NRC USCG 1-800-424-8802 | CA OES 1-800-852-7750 |
| If Possible: Local USCG SECTOR OFFICE | |
| San Francisco Bay | 510-437-3073 |
| LA/LB: | 310-521-3801 |
| San Diego | 619-683-6500 |

### 9110 Initial Awareness, Assessment & Notification Sequence

#### 9110.1 Initial Assessment Check-off List

DATE: _____ TIME: _____

SITUATION ASSESSMENT

Urgency of Situation:

IMMEDIATE SAFETY CONCERNS OF PERSONNEL ON-SCENE:

1. _____
2. _____
3. _____

ACTIONS UNDERWAY TO ENSURE SAFETY:

1. _____
2. _____

POSSIBLE WORST CASE SCENARIO(S):

1. _____
2. _____
3. _____

Vessel Situation:

WINDOWS OF OPPORTUNITY:

_____HOURS UNTIL SHIP STRANDS

_____HOURS UNTIL WEATHER, SEAS, WIND, CURRENT WORSEN/ACCELERATE WORST CASE

_____HOURS UNTIL SHIP SINKS

_____HOURS REQUIRED TO EXTINGUISH FIRE

_____ESTIMATED HOURS TO PREVENT WORST CASE SCENARIO

_____HOURS TO DETERMINE REQUIRED RESOURCES

_____HOURS UNTIL REPAIRS COMPLETED/MACHINERY ON LINE

_____HOURS TO ARRANGE FOR DISPATCH OF APPROPRIATE RESOURCES

_____HOURS UNTIL TOWING/FIREFIGHTING/SALVAGE VESSELS ARRIVE

_____HOURS TO RIG TOW LINE, PUMPS, OTHER EQUIPMENT

Spill Threat

ESTIMATED QUANTITY SPILLED:_____/_____
GALLONS/BARRELS

ESTIMATED RATE OF RELEASE_____

ESTIMATED BY: [ ] SOUNDING [ ] GAUGING

FREQUENCY OF TANK READINGS:_____

ESTIMATED TIME TO SECURE SOURCE: _____

OBSTACLES TO SECURING SOURCE:_____

SPILL TRAJECTORY:

DIRECTION OF MOVEMENT:_____

EST. SURFACE AREA OF SLICK:_____

ESTIMATED TIME TO LANDFALL:_____

Sensitive Site Issues

1._____

2._____

3._____

4._____

5._____

Equipment Requirements Estimates

Notes: 1. Use a separate worksheet for each individual site requiring a response.

SITE:

_____

_____

Boom:

Type _____ Length _____

Source _____ ETA: _____

Type _____ Length: _____

Source _____ ETA: _____

Type _____ Length _____

Source _____ ETA: _____

Type _____ Length: _____

Source _____ ETA: _____

Type _____ Length _____

Source _____ ETA: _____

Skimmers:

Type _____ Capacity: _____

Source _____ ETA: _____

Type _____ Capacity: _____

Source _____ ETA: _____

Type _____ Capacity: _____

Source _____ ETA: _____

Boats:

LOA _____ HP_____ Radio Freq _____

Source _____ ETA_____

LOA _____ HP_____ Radio Freq _____

Source _____ ETA_____

LOA _____ HP_____ Radio Freq _____

Source _____ ETA_____

Barges:

Make _____ Capacity _____

Source _____ ETA_____

Make _____ Capacity _____

Source _____ ETA_____

Make _____ Capacity _____

Source _____ ETA_____

Portable Pumps:

Type _____ HP _____

Source _____ ETA_____

Type _____ HP _____

Source _____ ETA_____

Type _____ HP _____

Source _____ ETA_____

Communication Equipment:

Type _____ Model _____ Number _____
Source_____ ETA_____

Type _____ Model _____ Number _____
Source_____ ETA_____

Type _____ Model _____ Number _____
Source_____ ETA_____

Type _____ Model _____ Number _____
Source_____ ETA_____

Sorbents:

Type _____Source_____ETA_____

Type _____Source_____ETA_____

Type _____Source_____ETA_____

Other Equipment:

Type _____Source_____ETA_____

Type _____Source_____ETA_____

Type _____Source_____ETA_____

Type _____Source_____ETA_____

Staging Area:_____

Transportation Support:

TYPE NUMBER SOURCE

Aircraft:_____ _____ _____

Trucks:_____ _____ _____

Other:_____ _____ _____

Boat:_____ Launch:_____

Personnel:

Deploy Boom _____Tend Boom _____

Operate Skimmer _____Vessel/Boat Operation _____

Deploy Sorbent _____Recover Sorbent _____

Other _____

Personnel Transportation:_____

## 9110.2 Initial Action Check-off List

### 9110.21.1 First 2 Hours

The following initial assessment and response actions (first 2 hours after notification) will be carried out by Federal, State and Responsible Party Incident Commanders in response to the report of an oil spill equivalent to any worst case, major or potential major spill. It is envisioned that the various response organizations will initially activate their Operations Sections and Command Staffs of the Incident Command System. All entities take action simultaneously to accomplish a rapid, effective and organized response. This is the first step toward establishing a fully functioning Unified Command System.

GOALS TO BE ACCOMPLISHED DURING THE FIRST 2 HOURS:

Ensure Personnel Safety

Secure Source

Complete Notifications

Assess Situation: Magnitude, Severity,& Threat

Initiate Immediate Response Actions

INCIDENT COMMANDER:

Federal, State, and Responsible Party (RP) Incident Commanders take the following immediate actions:

____ Complete Notifications.

____ Activate the Operations Section of the ICS. The Operations Section takes the immediate actions as assigned below.

____ Activate the Command Staff. The Command Staff elements take the immediate actions as assigned below.

____ Obtain Initial Incident Status and Situation Assessment Briefings from Operations Section Chief and Command Staff (complete ICS form 201).

____ Assess situation, determine priorities, establish strategic goals and tactical objectives, and assess response needs.

____ Identify team to consider use of alternate technologies, especially dispersants. Set goal for time of decision.

____ Develop initial Incident Action Plan (IAP) and identify initial preplanned response strategies to implement.

____ OSC decides if the Oil Spill Liability Trust Fund is to be opened. State Incident Commander decides if the State Fund is to be opened.

____ Authorize information releases to the media and schedule initial press conference.

____ Review results of initial helicopter over-flight of scene, and determine desired intensity of air operations.

____ Incident Commanders jointly establish a Unified Command organization, staffing and identify Command Post location.

OPERATIONS SECTION:

____ Request Coast Guard Search and Rescue Mission Coordinator respond as needed.

____ Request Emergency Medical Services assistance as needed. (EMS Operations will be performed and coordinated through existing local EMS systems.)

____ Determine if pollution source can be secured and direct operations to secure, if possible.

____ Dispatch pollution response team.

____ Identify and document the discharge source and Responsible Party, if necessary.

____ Evaluate the severity of the incident. Estimate window(s) of opportunity. (Figure 3000.C/D)

____ Conduct situation analysis including grounding, firefighting and salvage problems. (Sections 8000 & 3243)

____ Conduct HAZMAT situation investigations, site surveys, air monitoring, and analyze HAZMAT problems, if any.

____ Direct and manage HAZMAT resources to accomplish tactical operational objectives, if necessary.

____ Determine current, tide and weather effects on the situation and product movement.

____ Initiate data collection and evaluation of option to use dispersants. Use dispersant checklist from Section 4560.

____ Identify sites for immediate pre-cleaning. Identify personnel to conduct pre-cleaning operations.

____ Identify high priority areas for early protection. Select appropriate response strategies to implement from Section 4600.

____ Estimate equipment required for initial response priorities. (Figure 3000.D)

____ Direct the delivery and deployment of first equipment to arrive on scene.

____ Consider dispatching liaisons to local Oil Spill Response Organization(s).

____ Identify safety hazards that may be present and report observations to the Safety Officer.

____ Brief Incident Commander, make recommendations concerning priorities, strategic goals and tactical objectives. Assist with development of the Immediate Incident Action Plan.

____ Recommend that the Oil Spill Liability Trust Fund or State Fund be opened, if necessary. Coast Guard to obtain Federal Project Number and ceiling if the federal fund is opened. (Section 6300 & 3320.3)

____ Arrange for initial CG helicopter over-flight with Marine Safety Office observer and video link (or follow-up flight) for OSC, State and RP.

____ Ensure response teams issue appropriate Federal and State forms:

Notice of Federal Interest (CG)

Letter of Designation of Source (CG)

Directive/Administrative Order (CG)

Notice of Federal Assumption (CG)

____ Identify and request additional resource and logistics needs.

____ Suggest organization and staffing for the Operations Section of the Unified Command. (Section 3000)

SAFETY STAFF:

____ Identify and evaluate immediate public health and safety risks, and fire/explosion hazards.

____ Recommend site control or evacuations to isolate public from possible exposure.

____ Assess environmental conditions, including air and water monitoring, and recommend immediate actions to be taken by first responders for protection of health and safety.

____ Determine if spill has weathered to grade "D" or below.

____ Verify that all agency personnel already mobilized for initial response have the OSHA training required to participate in response.

____ Conduct site safety evaluation and develop Site Safety Plan. (See Sections 9932.1/2222)

____ Recommend staffing level for Safety Staff to Unified Command.

INVESTIGATION STAFF:

____ Dispatch casualty investigator to scene: ‘

To assist pollution team to identify source and RP.

To conduct drug testing (if applicable)

To secure statements, physical evidence, and samples.

____ Coordinate concurrent investigations and conduct cooperative investigations where appropriate.

____ Recommend staffing level for Investigations to Unified Command.

INFORMATION MANAGEMENT STAFF:

____ Act as Historian and record all case-related information. Ensure that all response personnel are carefully documenting all response and incident information. **(NOTE: Initiating data capture immediately is key to efficiently and effectively preparing to write the after-action report.)**

____ Complete Initial Incident Information Sheet and pass to all responders.

____ Draft Pollution Report (POLREP) for release by FOSC.

____ Setup and maintain a crisis information status board, summary forms, display systems and any other methods to effectively manage response information.

____ Initiate central data collection and routing systems.

PUBLIC AFFAIRS STAFF:

____ Prepare initial press release to read:

"Yes, we have received a report of a spill and we are in the process of investigating. A formal press release will be prepared as soon as possible."

____ Prepare more detailed press statement for future release. (Section 2221)

____ Make initial arrangements for first press briefing.

____ Organize and conduct Unified Command media briefings.

LIAISON STAFF:

____ Serve as the initial point of contact for participating response agencies and identify appropriate assignment to ICS.

____ Receive and coordinate all calls from public and private entities offering assistance or requesting information.

____ Make recommendations to the Incident Commander on the organization, staffing and tasking for the future Unified Command System.

____ Maintain a spill response summary distribution list for all public and private entities requesting spill response status reports.

____ Resolve and identify to the UC public and private concerns related to the status and effectiveness of the response.

LEGAL STAFF:

____ Provide legal advice to the Incident Commander in support of response decision-making.

**9110.21.2 As Incident Progresses**

GOALS TO BE ACCOMPLISHED:

Contain and Recover Spilled Product

Deploy Appropriate Pollution Countermeasures

Monitor and Evaluate Overall Response Strategy

Develop Daily Incident Action Plans

Establish Unified Command Post and Organization

UNIFIED COMMAND:

The Federal On-Scene Coordinator (OSC), State, and Responsible Party (RP) Incident Commanders take these actions:

____ Designate Unified Command Post location. Establish Unified Command schedule and daily routine including times for over flights, press briefings, staff and daily Incident Action Plan briefings (see Figures 3000.E – 3000.J for guidance).

____ Ensure Unified Command personnel understand their responsibilities as described in the ACP and task Unified Command elements in accordance with these responsibilities.

____ Authorize the ordering and deployment of response resources.

____ Attend the Response Operations Status Briefing.

____ Conduct initial Press Briefing.

PLANNING SECTION CHIEF:

____ Complete Incident Action Plan and brief Unified Command (Response Planning Briefing). Report on effectiveness of initial response actions underway.

____ Develop and recommend oil spill response activity priorities during early response phases to the Unified Command.

____ Attend Response Operations Status Brief.

____ Initiate response planning for day 2. Develop alternative strategies.

STRATEGY BRANCH:

____ Assist Planning Section Chief develop natural resource protection priorities and protection strategies using Section 4600 and other references. Document strategy plans.

____ Prepare and update alternative response strategies and tactical operations plans that anticipate changing requirements.

____ Identify and recommend additional resources and logistics needs.

____ Collect, analyze, and disseminate information about the situation as it progresses, including:

(a) personnel

(b) equipment

(c) facilities

(d) materials and supplies

(e) casualty information

(f) discharge information

(g) environmental observations and forecasts

(h) impacts to natural and economic resources; and

(i) the status of response operations

____ Complete a Situation Status Report Form for briefings as needed.

TECHNICAL BRANCH:

____ Finalize evaluation of appropriate opportunities to effectively use Alternative Response Technology (ART), including chemical countermeasures, in-situ burning, bioremediation. (Section 4560)

____ Coordinate with Natural Resource Trustees to forecast, identify, and assess natural resource injuries. (Section 5630.1)

____ Provide the Planning Section Chief with a disposal Plan that details the collection, temporary storage, transportation, recycling, and disposal of all anticipated response wastes. (Section 3320.4 & 4550)

____ Provide scientific and technical information and analysis to support response planning and operations.

OPERATIONS SECTION CHIEF:

____ Assist the Planning Section to define strategic response goals and tactical operational objectives for the Incident Action Plan.

____ Develop detailed mission assignments, sortie schedules, duty lists to accomplish the operational objectives detailed in the Incident Action Plan.

____ Document, evaluate and report on response countermeasure efficiency.

____ Provide feedback to Planning Section on field operations with recommendations for long or short-term plans to be developed.

____ Brief Unified Command. (Response Operations Status Brief)

RECOVERY/PROTECTION BRANCH:

____ Implement, in priority, the preplanned protection and recovery strategies identified in the Incident Action Plan (see section 4600 of the ACP).

____ Deploy and maintain booms, dikes, or other protection devices as directed to accomplish protection, diversion, or containment strategies, and modify planned strategies as required by actual field conditions.

____ Direct the deployment and operation of VOSS's, skimmers, vacuum trucks and other equipment and methods to effectively accomplish the tactical cleanup objectives of the Incident Action Plan.

____ Identify field conditions affecting containment, skimming and other cleanup operations and counteract, if possible.

____ Direct the collection, temporary storage, transportation, recycling and disposal of recovered wastes.

____ Ensure that product which has been contained, diverted or collected is recovered and transferred to approved temporary storage sites.

____ Manage temporary storage sites to prevent secondary discharges or cross contamination.

____ Confirm the laboratory results characterizing the wastes as hazardous or non-hazardous, and prepare required RCRA manifests as required.

____ Confirm the capacities of recycling or disposal sites.

____ Identify decontamination needs and direct required cleaning/decontamination of vessels, equipment and personnel.

____ Maintain up-to-date estimates of product recovered and volume of waste generated.

____ Report on the status, efficiency and effectiveness of shore side recovery, cleanup methods, and resources used to Operations Chief for daily briefings.

____ Identify and request additional protection resource and logistics needs.

AIR OPERATIONS BRANCH:

____ Request NOTAM to implement positive air space control.

____ Provide surveillance over flights as requested by Unified Command.

____ Arrange for Coast Guards HU25B Aireye aircraft unless resources provided by RP.

____ Request additional aircraft resources and release aircraft when authorized.

____ Direct and coordinate air operations missions to conduct oil spill tracking, observation, and remote sensing.

____ Coordinate mission tasking with scientific and technical observers.

____ Report oil spill tracking, observation, and remote sensing results and coordinate observation to direct operational activities.

____ Conduct air operations missions to apply dispersants, chemical countermeasure, bioremediation, or other alternative response technologies as directed by the Operations Section Chief.

____ Coordinate ground services and aircraft support.

____ Identify and request additional logistics needs.

SITE MANAGEMENT BRANCH:

____ Identify and prepare designated staging sites and facilitate the movement of response resources into operation.

____ Develop and implement the Incident Security Plan.

____ Develop safety zones, security zones, and vessel traffic management alternatives for approval by the Captain of the Port (COTP).

____ Coordinate and implement enforcement of safety zones, security zones, and vessel traffic management systems.

____ Identify and request additional resources and logistics needs.

WILDLIFE OPERATIONS BRANCH:

____ Coordinate wildlife recovery and capture operations.

____ Establish wildlife rehabilitation centers and conduct rehabilitation operations.

____ Maintain documentation on wildlife delivered for rehabilitation.

____ Identify resources and logistics support requirements.

LOGISTICS SECTION CHIEF:

____ Ensure the prompt delivery of resources to support response operations. Early emphasis on the delivery of heavy response equipment and personnel, providing communications resources, and the continuous need for support services are the highest priorities.

____ Brief Unified Command. (Response Operations Status Brief)

COMMUNICATIONS BRANCH:

____ Request CG transportable communications center and set up PST communications van for interim.

____ Develop, implement, and coordinate the Incident Communications Plan.

____ Post diagram of comms system with frequency use information with Information Management Branch.

____ Deliver, issue, track, maintain, and support all communications resources.

____ Identify additional communications resources or logistics needs.

SERVICE BRANCH:

_____ Provide and coordinate emergency and routine medical services to response personnel.

_____ Provide and coordinate meals and subsistence support to response personnel.

_____ Plan, document, and account for the number and type of meals required.

_____ Establish kitchens, galleys, canteens, and other food services support locations.

_____ Provide potable drinking water and other beverages required to support response operations.

_____ Provide and coordinate berthing facilities assigned to response personnel.

_____ Plan, document, and account for the number and type of berthing facilities required.

_____ Maintain berthing quarters, and hotel contracts to provide sleeping, hygiene, and restroom facilities for response personnel.

SUPPORT BRANCH:

_____ Deliver and coordinate the delivery of response equipment, material, and supplies with early emphasis on protective booms, boom boats and skimmers.

_____ Maintain stocks of expendable supplies ready to be issued.

_____ Issue personal protective equipment, ready gear bags, and expendable personal supplies to response personnel.

_____ Coordinate the ordering and delivery of spare parts, supplies, materials, and other resources to meet response needs.

_____ Provide and coordinate response facility locations, including Command Posts, staging sites, communications facilities, berthing, messing, and sanitary facilities, and other response facilities.

_____ Operate and manage the "motor pool" of dedicated ground transportation vehicles.

PERSONNEL BRANCH:

_____ Coordinate authorized response assignments made to qualified emergency response workers.

_____ Determine personnel need for response, and identify source of personnel. Ensure personnel are properly trained, and health and safety issues addressed.

_____ Plan, document, and account for response personnel assignments.

_____ Develop and manage a Unified Command personal locator system (roster) to track the assignment and location, including phone numbers, of individual responders.

_____ Develop and manage watch rotation assignments. Ensure watch schedule published and distributed to all personnel.

_____ Manage and coordinate the processing of private individuals and public groups volunteering to perform response operations.

_____ Manage the training, qualification, and certification process needed to convert private volunteers into qualified emergency response workers.

FINANCE SECTION CHIEF:

____ Refer to Section 6500 for Cost Documentation and Recovery checklist.

____ Provide, manage, coordinate, document, and account for access to response funding sources, including the Oil Spill Liability Trust Fund, Natural Resources Damage Assessment Fund, State of California funding sources and any other sources of response funding.

____ Coordinate and ensure the proper completion of response cost accounting documentation.

____ Coordinate and manage response ceilings, budgets and cost estimates.

____ Serve as the primary contact to the National Pollution Funds Center (NPFC) and the NPFC Case Officer.

CONTRACT BRANCH:

____ Negotiate, coordinate, document, and manage all contracts needed to support response operations.

____ Manage, coordinate, document, and account for all procurement orders needed to support response operations.

____ Manage, coordinate, document, and account for all payments made to support response operations.

COST BRANCH:

____ Manage, coordinate, and perform cost documentation in accordance with OSLTF and State requirements to account for response costs.

____ Plan, coordinate, document, and account for response costs based on the time personnel, equipment, and other resources accountable to the response.

**9110.21.3 Cost Documentation and Recovery**

GOALS TO BE ACCOMPLISHED:

Open the Oil Spill Liability Trust Fund, if necessary

Open the State Fund, if necessary

Authorize private and government entities to conduct cleanup and removal operations

Document cleanup and removal costs according to

applicable procedures

UNIFIED COMMAND:

____ Approve access to the Oil Spill Liability Trust Fund (OSLTF) and set response ceilings. (FOSC)

____ Exercise concomitant responsibility for effective ceiling management while incident is ongoing. (FOSC)

____ Decide if other agencies may assist in cleanup and removal effort(s) (federal, state, local or Indian tribe) and authorize the agency or agencies to perform the cleanup/removal operations.

____ Decide on private contractor(s) to employ for cleanup/removal operations, if any.

____ Approve access to the State Fund, if necessary. (State IC)

____ If accessed, ensure State Funds are managed in accordance with applicable procedures. (State IC)

FINANCE SECTION CHIEF:

____ Coordinate and ensure response cost accounting documentation is conducted in accordance with the National Pollution Funds Center Technical Operating Procedures (TOPs) (NPFCINST 16451.2) for removal activities that require reimbursement from the OSLTF.

____ Coordinate and ensure that other reimbursable removal activities are conducted in accordance with state and or local procedures, if necessary.

____ Serve as the primary contact to the National Pollution Funds Center and the NPFC Case Officer to coordinate response cost recovery actions.

CONTRACT BRANCH:

____ Issue a verbal Authorization To Proceed (ATP) for Basic Ordering Agreement (BOA) Contractor(s) and identify a specific ceiling for each contractor. Follow-up with a written delivery order (OF-347).

____ Contact the Contracting Officer (MLCPAC(f) at 510-437-5915 or after hours through PACAREA OPCEN (510-437-3700)) to inform him/her that a verbal ATP was issued. Forward the written delivery order to the Contracting Officer.

____ If no BOA Contractor is available, call the Contracting Officer to request issuance of a services contract. (If unable to reach the Contracting Officer, issue ATP (FOSC limit is $25,000) and inform the Contracting Officer at the earliest opportunity). **note** The COTP Zone LALB is under a special pilot program with the NPFC which raises the FOSC limit to $50,000.

____ If State Fund is accessed, follow applicable state contracting procedures to obtain cleanup contractor services.

COST BRANCH:

____ If FOSC approves access to the OSLTF, obtain a Federal Project Number and corresponding ceiling authorization from PACAREA OPCEN @ 510-437-3701. The following information must be provided when requesting a FPN:

1. Name of all known vessels and/or facilities involved
2. Substance spilled and estimated amount, if known.
3. The source of the discharge or threat of discharge.
4. The responsible party, if known.
5. The location and date of the discharge.
6. The body of water impacted or threatened.
7. The initial ceiling requested under this FPN.
8. The planned obligations under this FPN (for example, EPA/ERT costs).
9. The name of the cleanup contractor(s) selected, if any.

____ Follow-up verbal request with message traffic.

____ Request increase(s) in ceiling, if necessary.

____ Ensure the following information is included in each POLREP released:

1. The approved project ceiling

2. Estimated cumulative obligations to date

____ Determine complexity level of the case. Ensure NPFCINST 16451(series) operating procedures are carried out for the appropriate level.

____ Level I - Routine: Removal costs not to exceed $50,000; removal activities to be completed within 1-2 weeks.

____ Level II - Moderately Complex: Removal costs are between $50,000 and $200,000; removal activities take place in several locations with various government agencies involved.

____ Level III - Significantly Complex: Removal costs are greater than $200,000; removal activities involve several contractors and government agencies and several locations.

____ If spill is Level II, consider calling NPFC for assistance. If Level III, call NPFC immediately for assistance at 703-235-4765/67/68.

____ Ensure all parties involved in removal activities understand cost documentation requirements of FOSC or State IC.

____ If Alternate Record Keeping System is proposed, ensure system is approved by the NPFC prior to implementing the alternate system.

____ Complete Daily Resource Report (Dailies) covering unit resources involved in removal activities.

____ Collect Daily Resource Reports or official records from other Coast Guard units.

____ Issue "Pollution Removal Funding Authorizations" (PRFA) to other government agencies for removal activities.

____ Review the SF-1080 and Daily Resource Reports submitted by other government agencies and certify that services were authorized and completed.

____ Review contractor invoices and Daily Resource Reports and certify that services were authorized and completed.

____ Resolve any discrepancies between government agencies and contractors prior to submitting documentation.

____ Ensure all documentation submitted with frequency required by NPFCINST 16451(series)

____ Submit Completion Report to NPFC. If case is expected to last several months, submit interim reports at 30-day intervals.

**9110.21.4 Removal and Disposal**

GOALS TO BE ACCOMPLISHED:

Take proactive steps to minimize waste production

Ensure that recovered products are recycled, if possible

Approve temporary storage sites

Ensure that all waste products are transported and

Disposed of properly

UNIFIED COMMAND:

____ FOSC, State IC determine conditions under which decanting will be authorized, including locations, duration, and maximum hydrocarbon level of the discharge. If Marine Sanctuary is involved, the NOAA Administrator of the Marine Sanctuary will approve decanting.

____ Review and approve proposed disposal plan.

____ Ensure that waste generation is minimized, recycling is maximized and that all waste generated is disposed of properly.

DISPOSAL UNIT:

____ Immediately identify sites to be pre-cleaned for minimizing waste generation. Develop pre-cleanup plan and identify personnel to conduct pre-cleanup operations.

____ Monitor pre-cleanup operations on-site.

____ Recommend to the Incident Commanders (and NOAA Administrator of the Marine Sanctuary, if applicable) of the conditions, if any, under which decanting should be allowed so that skimming operations are as efficient as possible.

____ RP, OSPR and California Environmental Protection Agency, Department of Toxic Substance Control (DTSC), representatives develop a detailed disposal plan for each forward command post or skimming site, as needed. Include, as a minimum, identification of temporary storage sites, State certified testing lab(s) to be used, waste/product transportation logistics, any on-site treatment, recycling procedures and disposal sites.

____ Submit disposal plan to Unified Command for review and approval.

____ Coordinate with the Safety Officer to ensure use of disposable protective equipment is balanced against the waste generation consideration/problem.

____ Coordinate with the Recovery and Protection Branch to ensure use of disposable sorbents is balanced against the waste generation consideration/problem.

____ DTSC representative to evaluate and approve temporary storage site(s).

____ Contact the Regional Water Quality Board (RWQCB) for concurrence of the temporary storage sites.

____ Ensure that local government emergency response agencies concur with temporary storage sites and obtain any applicable permits.

____ Ensure all waste is tested at a State certified lab, as required, prior to transportation for recycling or disposal.

____ Ensure that all material determined to be hazardous is properly manifested and transported to a Class I waste management facility.

____ Ensure that material determined to be non-hazardous is identified on a bill of lading and transported to a Class II waste management facility identified by the local health department(s) and the RWQCB.

____ DTSC representative to determine if cleanup materials can/should be treated by a Transportable Treatment Unit (separation or decanting of water or incineration) at the temporary storage site.

____ If cleanup materials are treated at the temporary storage site, ensure that the applicable permits are obtained from the Regional Water Quality Control Board or the local Air Quality Control agency.

____ OSPR representative to handle all oiled wildlife and carcasses.

**9110.21.5 Demobilization and Secure Operations**

GOALS TO BE ACCOMPLISHED:

Develop and Implement Demobilization Plan

Conduct Final Survey

Finalize FOSC Report/Capture Lessons Learned

Secure Operations

UNIFIED COMMAND:

____ Review and approve proposal for securing operations: define criteria to be met before site is considered "clean" for the purposes of the cleanup operations.

____ Review and approve demobilization plan.

____ Develop recommendations for improving future cleanup operations.

____ FOSC review and submit final report to the Regional Response Team.

____ Give the order to secure operations.

INFORMATION MANAGEMENT STAFF:

____ Prepare final incident report and submit to FOSC for approval.

PLANNING SECTION:

____ Develop, distribute, and implement a demobilization plan, including recommendations for release of resources. Ensure resources demobilization schedule meets all operational needs and that equipment is not released too early in the cleanup process.

____ Develop specific criteria under which operations will be secured (define "clean") and forward to the UC for review/approval.

____ Coordinate Natural Resource Trustees and ensure all damage assessment studies are completed or substantially underway. Prepare and submit final report to UC.

____ When ordered, secure operations and forward all necessary documentation to the Information Management Staff, including a list of lessons learned.

LOGISTICS SECTION:

____ Implement natural resource restoration.

____ Establish demobilization facilities and coordinate all logistics for equipment removal.

____ Provide logistics for decontamination of cleanup equipment and vessels.

____ Coordinate the delivery of crane barges and other demobilization equipment.

____ Account for all equipment (vehicles, comms gear, etc.).

____ When ordered, secure operations and forward all necessary documentation to the Information Management Staff, including a list of lessons learned.

OPERATIONS SECTION:

____ Identify decontamination resource and logistics needs for all equipment and accomplish necessary decontamination.

____ Establish vessel-cleaning stations and monitor decontamination operations.

____ Secure safety zones, security zones, and vessel traffic management systems implemented for the spill.

____ When ordered, secure operations and forward all necessary documentation to the Information Management Staff, including a list of lessons learned.

FINANCE SECTION:

____ Ensure all cost documentation is finalized and completed in accordance with NPFCINST 16451(series). Submit Completion Report to the NPFC.

____ When ordered, secure operations and forward all documentation to the Information Management Staff, including a list of lessons learned.

**9110.21.6 Suggested Schedule of Events**

UNIFIED COMMAND

0600 Release POLREP (Information Management Staff)

0700 Release Press Statement (Public Affairs Staff)

0700-0730 Staff Brief: Unified Command Staff

1000-1100 Response Operations Status Brief

1100 Press Brief: Incident Commanders

1300-1700 Field Survey/Overflight

1700 Response Operations Status Brief

Response Planning Brief

1800 Release POLREP (Information Management Staff)

FIELD OPERATIONS

0600-0630 Forward Command Post Brief: Incident Action Plan of the Day

0600-1800 Carry out Incident Action Plan of the Day

0800 Situation Status Update to Unified Command Post*

1300 Situation Status Update to Unified Command Post*

1300-1700 Field Survey/Overflight: Unified Commanders

1600 Situation Status Update to Unified Command Post*

1800 Forward Command Post Debrief

Review Next Day's Incident Action Plan

2000 Situation Status Update to Unified Command Post*

2000-0600 Prepare for Next Day's Incident Action Plan

* These are brief situation status updates ("all boom deployed, 2 skimmers operational", etc) from field posts to the Operations Section Chief of Unified Command Post and will normally be communicated via telephone or fax.

**9110.21.7 Staff Brief**

[Purpose: The purpose of the daily Command Staff Briefing is to communicate and discuss issues involving the internal Unified Command organization. For example, the Unified Command, including the Command Staff, is expected to grow or shrink based on operational needs. Internal structure and personnel assignments would be discussed and decided on at this meeting. Other items for the Command Staff include the effectiveness and efficiency of internal information management (routing/dissemination); issues involving the daily press briefing; legal issues; etc. Once the organization is fully functioning, these meetings will occur with less frequency. It is envisioned that the Unified Commanders, Command Staff Chiefs, and the Operations, Logistics, Planning and Finance Chiefs would be present at this meeting.]

SUGGESTED AGENDA

BRIEFING ITEM BRIEFING BY

1. Safety Issues Safety Staff Chief

Site Safety Plan Update

2. UCS Organization Changes Liaison Staff

Public and Private Concerns

Other Liaison Issues

3. Joint Information Center Issues Public Affairs Staff

Daily Press Briefing Issues/Concerns

4. Investigation Status/Issues Update Investigations Staff

5. Status of Information Management System Info Management Staff

6. Status/Update on Legal Issues Legal Staff

RESPONSE OPERATIONS STATUS BRIEF

[Purpose: The purpose of the Daily Operations Briefing is to communicate the status of all operations. This brief does not include future plans because these are developed in detail by the Planning Staff and presented/discussed during the afternoon briefing. As the operational tempo subsides, the two briefings would be combined into one. The Unified Commanders, Command Staff Chiefs and the Planning, Operations, Logistics, and Finance Chiefs would attend this meeting. The Unified Commanders conduct the press briefing immediately following this briefing.]

SUGGESTED AGENDA

BRIEFING ITEM BRIEFING BY

1. OPERATIONS Chief, Operations

Situation Status Report*

Estimate of Total Oil Spilled

Estimate of Total Oil Recovered

Total On Water Equipment Resources Employed

Total On Land Equipment Resources Employed

Shoreline Status

Status of Response Operations

Current Field Conditions

Wildlife Recovery Operations Update

Status of Waste Management/Disposal Operations

Future Recommendations for Planning and Logistics Sections

2. LOGISTICS Chief, Logistics

Logistics Status Report

Status of Communications: Resources and Needs

Services Update: Medical, Food, Berthing, and Restrooms

Supplies: Status of Needs, Delivery, Inventory

Facilities Update: Forward Command Post(s), UC Post

Transportation: Status of Needs, Schedules, and Resources

Personnel: Numbers, Assignments, and Volunteers

Future Recommendations for Planning and Ops Sections

3. FINANCE Chief, Finance

Finance Status Report:

Contracts

Expenditures

Claims

Future Recommendations

*Completed Situation Status Report Form to be provided at each briefing by the Planning Section.

RESPONSE PLANNING BRIEF

[Purpose: This briefing is conducted immediately after the afternoon Response Operations Status Briefing with the objectives of reviewing efforts to implement current Incident Action Plan of the Day and presenting the Response Plan for the next 24 hours. It is envisioned that the Unified Commanders, Command Staff Chiefs, and the Operations, Logistics, Planning and Finance Chiefs would be present at this meeting.]

SUGGESTED AGENDA

BRIEFING ITEM BRIEFING BY

1. Status of Efforts to Implement Planning Section

Incident Action Plan of the Day

(last 24-hr)

2. Presentation of Incident Action Plan for next 24-hrs:

Strategic Objectives

Response Priorities

Key Assets Required to Achieve Goals

Weather Considerations

Alternative Strategies

Responsibilities for Elements

Status of the General (long-range) Plan

### 9110.3 Notification Check-off List

A substantial spill of oil usually has a responsible party (RP) who is aware that the discharge has occurred (as in the case of a vessel grounding or collision, or a tank or pipeline rupture at a facility, for example). The party responsible for a discharge of oil into the navigable waters of the United States is required by federal law (40 CFR Part 302) to immediately report the discharge to the Coast Guard; and if the discharge occurs within the waters of the state of California, by state law to report it to the state. Responsible parties meet their requirement under federal law by reporting the spill to the National Response Center or to the local Coast Guard Sector Office. State law requires the report to be made to the Office of Emergency Services. However, reports of oil spills (usually smaller ones) are often made by persons other than the responsible party directly to the local Coast Guard SECTOR or to the NRC. The diagram below depicts the ways that the initial notification of an oil spill can be received, and the notification protocol that exists among the federal and state principals.

NRC USCG 1-800-424-8802 CA OES 1-800-852-7750

If Possible: Local USCG MARINE SECTOR OFFICE

San Francisco Bay 510-437-3073

LA/LB: 562-980-4444

San Diego 619-683-6500

Information to be collected and passed as part of the notification procedure is listed on the Incident Information Form. The minimum information required to be passed is indicated by an asterisk (*) on the form. The form designates responsibility and ensures accountability for the notification of other federal and state agencies and non-profit/public interest groups. The intent is to show the chain of responsibility for notifications, rather than a specific notification check off list intended for use by all parties. No attempt has been made to represent the complete notification lists used by state and local government emergency contacts.

FEDERAL AGENCY/GROUP RESPONSIBLE FOR NOTIFYING:

CG SECTOR (SF, LA, SD) USCG Pacific Strike Team 415-883-3311(24hr)

| | |
|---|---|
| CA OES | 800-852-7750 (24hr) |
| CA DFG/OSPR | 916-323-0716 (24 hr) |
| CG PACAREA/D11 OPCEN | 510-437-3700 (24hr) |
| NOAA SSC | 800-SKY-8888/PIN |
| | 579-8818 (24h) |
| | 510.772.8279 |

Duty PA (Alameda) -- (Email 5107728865@page.nextel.com)

| | |
|---|---|
| USCG Public Affairs (north) | 510-437-3325 |
| Cell | 510-772-8865 |
| USCG Public Affairs (south) | 310-420-6668 |
| PIAT | 252-331-6000 |
| USCG Group/Airsta Humboldt Bay | 707-839-6116 |
| USCG Sector San Francisco | 415-399-3417/3530 |
| USCG SECTOR LA/LB | 562-980-4444 |
| USCG Sector San Diego | 619-295-3121 |

STATE OF CALIFORNIA

AGENCY/GROUP RESPONSIBLE FOR NOTIFYING:

CA OES

CA EPA, Dept. of Toxic Substance Control 916-324-1826(24hr)

| | |
|---|---|
| CALTRANS | 510-286-0315(24hr) |
| California Highway Patrol (CHP) | 707-648-5550(24hr) |

** Other agencies as prescribed by state notification system

County OES

County Health Department(s) (or designated local emergency contact)

County Fire Department(s)

County & City Police Department(s)

Harbormaster(s)/Port Authority(s)

** Other agencies and groups as prescribed by county notification system

** owners/operators/trustees of property or facilities potentially impacted
Harbormaster(s)/Fisherman's Organization(s) Port Authority(s)

OSPR

| | |
|---|---|
| CA Office of Emergency Services | 800-852-7550 (24hr) |
| CA Dept. of Parks & Recreation | 916-988-7322 (24hr) |
| CA Coastal Commission | 415-904-5200 |
| CA State Lands Commission | 800-852-7550 (24hr) |

| | |
|---|---|
| Farallones Nat'l Marine Sanctuary | 415-561-6622 |
| International Bird Rescue Research Center | |
| (IBRRC) | 510-841-9086 (24hr) |
| IBRRC Marine Mammal Center | 415-289-7325 (24hr) |
| National Park Service/GGNRA | 415-561-4620(24hr) |
| State Interagency Oil Spill Committee | |
| (SIOSC) Confidential Notification List | |
| U.S. Fish & Wildlife Service | |
| (appropriate field office) | |
| Wildlife Contacts | |
| Center for Marine Conservation | 415-391-6204 |
| Marine Mammal Center | 415-289-7325(24hr) |
| Marine Mammal Center Friends of the Sea Otter | 415-289-7325 (9am-5pm) |
| Pacific Wildlife Care Center | 805-489-0411 |
| Save Our Shores | 831-462-5660 |

*This table is intended to show possible notifications. It is not a detailed notification checklist.

## *9200* Personnel and Services Directory

### 9210 Federal Resources/Agencies

Refer to Section 5010 of the REGIONAL CONTINGENCY PLAN.

#### 9210.1 Trustees for National Resources

Refer to Section 5010 of the REGIONAL CONTINGENCY PLAN.

#### 9210.2 USCG

Refer to Section 5010 of the REGIONAL CONTINGENCY PLAN.

**9210.21.1 USCG National Strike Force (NSF)**
Refer to Section 5010 of the REGIONAL CONTINGENCY PLAN.

**9210.21.2 USCG District Response Assist Team (DRAT)**
Refer to Section 5010 of the REGIONAL CONTINGENCY PLAN.

**9210.21.3 Public Information Assist Team (PIAT)**
Refer to Section 5010 of the REGIONAL CONTINGENCY PLAN.

**9210.21.4 USCG Reserve**
Refer to Section 5010 of the REGIONAL CONTINGENCY PLAN.

**9210.21.5 USCG Auxiliary**
Refer to Section 5010 of the REGIONAL CONTINGENCY PLAN.

#### 9210.3 NOAA

Refer to Section 5010 of the REGIONAL CONTINGENCY PLAN.

#### 9210.31.1 Scientific Support Coordinator
Refer to Section 5010 of the REGIONAL CONTINGENCY PLAN.

#### 9210.31.2 Discharge and Release Trajectory Modeling
Refer to Section 5010 of the REGIONAL CONTINGENCY PLAN.

#### 9210.31.3 Oceanic and Atmospheric Modeling
Refer to Section 5010 of the REGIONAL CONTINGENCY PLAN.

### 9210.4 US Navy Supervisor Salvage (SUPSALV)

Refer to Section 5010 of the REGIONAL CONTINGENCY PLAN.

### 9210.5 EPA Emergency Response Teams

Refer to Section 5010 of the REGIONAL CONTINGENCY PLAN.

### 9210.6 Agency for Toxic Substance and Diseases (ATSDR)

Refer to Section 5010 of the REGIONAL CONTINGENCY PLAN.

## 9220 State Resources/Agencies

Refer to Section 5011 of the REGIONAL CONTINGENCY PLAN.

### 9220.1 Government Official Liaisons

Refer to Section 5011 of the REGIONAL CONTINGENCY PLAN.

### 9220.2 Trustees for Natural Resources

Refer to Section 5011 of the REGIONAL CONTINGENCY PLAN.

### 9220.3 State Emergency Response Committees (SERC)

Refer to Section 5011 of the REGIONAL CONTINGENCY PLAN.

### 9220.4 State Environmental Agencies

Refer to Section 5011 of the REGIONAL CONTINGENCY PLAN.

### 9220.5 State Historic Preservation Office

Refer to Section 5011 of the REGIONAL CONTINGENCY PLAN.

### 9220.6 Law Enforcement Agencies

Refer to Section 5011 of the REGIONAL CONTINGENCY PLAN.

### 9220.7 Hazardous Substances Response Teams

Refer to Section 5011 of the REGIONAL CONTINGENCY PLAN.

## 9230 Local Resources/Agencies

### 9230.1 Trustees for National Resources

#### 9230.11.1 Northern Sector
#### 9230.11.2 San Luis Obispo County
Monterey Bay Marine Sanctuary

NOAA Sanctuary Manager – Terry Jackson (408) 642-4207

California Sea Otter Game Refuge

California Dept. of Fish & Game
Sea Otter Biologist – Mike Harris (805) 772-1135

Morro Dunes Ecological Reserve
California Dept. of Fish & Game
Jim Lidberg (805) 528-0782

Pismo Invertebrate Reserve
California Dept. of Fish & Game
Bob Hardy (Morro Bay Office) (805) 772-1261

Pismo – Oceano Beach Pismo Calm Reserve
California Dept. of Fish & Game
Bob Hardy (Morro Bay Office) (805) 772-1261

William R. Hearst Memorial State Beach
San Simeon State Beach
Leffingwell Landing State Beach
California State Dept. of Parks & Recreation
Park Superintendent – Debra Weldon (805) 927-2065
Resource Ecologist – Greg Smith (805) 927-2119
(805) 927-2068 (24 hrs)

Morro Strand State Beach
Morro Bay State Beach
Montana de Oro State Park
Pismo State Beach
Pismo Off-Road Vehicular Recreation Area
California State Dept. of Parks & Recreation
Park Superintendent (805) 549-3312
Resource Ecologist – Vince Ciero (805) 549-3312
(805) 473-7220 (24 hrs)
Resource Ecologist (ORV Park)
Ann-Marie Tipton (805) 473-7230

### 9230.11.3 Santa Barbara County

| | |
|---|---|
| Andre Clark Bird Refuge<br>City of Santa Barbara | (805) 564-5433 |
| Arroyo Burro Beach Park<br>Santa Barbara County Parks | (805) 687-3714 |
| Carpinteria Marsh<br>(El Estero)<br>Univ. of CA, Santa Barbara | (805) 893-4127 |
| Carpinteria State Beach<br>State of California<br>Parks Department | (805) 968-1711 |
| Coal Oil Point Reserve<br>Devereux Lagoon & Goleta<br>South | (805) 893-4127 |
| El Capitan State Beach<br>State of California Parks Department | (805) 985-0133<br>(805) 968-3294 |
| Gaviota State Park<br>State of California Parks Department | (805) 968-3294 |
| Goleta Beach County Park<br>Santa Barbara County Parks | (805) 967-1300 |
| Jalama Beach County Park<br>Santa Barbara County Parks | (805) 736-3504 |
| Ocean Beach County Parks<br>Santa Barbara County Parks | (805) 937-1302 |
| Rancho Guadalupe County Park | (805) 937-1302 |

Santa Barbara County Parks

| | |
|---|---|
| Refugio State Beach | (805) 968-3294 |
| State of California Parks Department | |

### 9230.11.4 Ventura County

| | |
|---|---|
| Vandenberg AFB | (805) 734-8232 |
| (Game Warden) | Ext. 66804 |
| Emma Wood State Beach | (805) 648-3918 |
| State of California Parks Department | |
| McGrath State Beach | (805) 654-4744 |
| State Wildlife Refuge | |
| Point Mugu State Park | (805) 499-2112 |
| State of California Parks Department | |
| San Buenaventura State Beach | (805) 654-4610 |
| State of California Parks Department | (805) 654-4611 |
| United States Navy | (805) 989-8094 |
| Pacific Missile Test Center | |

### 9230.11.5 Channel Islands

Anacapa

| | |
|---|---|
| Channel Islands National Park | (805) 658-5700 |
| Channel Islands National | (805) 966-7107 |
| Marine Sanctuary | |

San Miguel

| | |
|---|---|
| Channel Islands National Park | (805) 658-5700 |
| Channel Islands National | (805) 966-7107 |
| Marine Sanctuary | |

| | |
|---|---|
| San Nicolas | |
| United States Navy | (805) 989-7259 |
| | |
| Santa Barbara | |
| Channel Islands National Park | (805) 658-5700 |
| Channel Islands National | (805) 966-7107 |
| Marine Sanctuary | |
| | |
| Santa Cruz (Western 90%) AQ | |
| Private Ownership | (805) 962-9111 |
| Nature Conservancy | |
| | |
| Santa Rosa | |
| Channel Islands National Park | (805) 658-5700 |
| Channel Islands National | (805) 966-7107 |
| Marine Sanctuary | |

**9230.11.6 Southern Sector**

**9230.11.7 Los Angeles County**

| | |
|---|---|
| Leo Carillo State Beach | (818) 880-0350 |
| State of California Parks Dept. | |
| | |
| Malibu Lagoon State Beach | (310) 456-8432 |
| State of California Parks Dept. | |
| Malibu Creek Warden | |
| | |
| Point Dume State Beach | (310) 796-5621 |
| State of California Parks Dept. | (916) 653-6995 |
| | |
| Point Fermin Marine Life Refuge | (562) 590-5129 |
| CA Dept. of Fish & Game | |
| | |
| Santa Catalina Island Conservancy | (310) 510-222 |
| Topanga State Beach | (310) 454-8212 |
| State of California Parks Dept. | (310) 455-2465 |

Zuma County Beach
Los Angeles County Parks (818) 888-6911

**9230.11.8 Orange County**

Bolsa Chica State Beach (714) 536-1454
State of California Parks Dept. (714) 848-1566
Bolsa Chica Wetlands (562) 590-5129
CA Dept. of Fish & Game,
Wildlife Management Division

Crystal Cove State Park (714) 492-0802
State of California Parks Dept.

Dana Point Marine Life (562) 590-5129
Dana Point Harbor
CA Dept. of Fish & Game

Huntington State Beach (714) 848-1566
State of California Parks Dept.

Irvine Coast Marine Life (562) 590-5129
(inside Crystal Cove Park)
State of California Parks Dept.

Laguna Beach Marine Life Refuge (562) 590-5129
(including Glenn E. Vedder Ecological Reserve)
Laguna Beach

Niguel Marine Life Refuge (562) 590-5129
Salt Creek Park
CA Dept. of Fish & Game

Santa Ana River (714) 667-3600
Orange County Environmental

Management Agency

| | |
|---|---|
| Seal Beach National Wildlife Refuge<br>U. S. Naval Weapons Station | (619) 930-0168 |
| State of California<br>Dept. of Fish & Game<br>Wildlife Management Division | (562) 590-5129 |

**9230.2 Local Emergency Planning Committees**

Local Emergency Planning Committee (LEPC) Region I covers this COTP area:

State Office of Emergency Services
AFRC, Building 283
11200 Lexington Drive
Los Alamitos, CA 90720-5002

(562) 795-2901
(562) 795-2877 (Fax)

**9230.21.1 Local Emergency Managers**
**9230.21.2 Northern Sector**
**9230.21.3 San Luis Obispo County**

| | |
|---|---|
| Emergency Services Office | (805) 781-5011 |
| Emergency | (805) 781-4553 or 4550 |

**9230.21.4 Santa Barbara County**

| | |
|---|---|
| Emergency Management | (805) 683-2724 or<br>(805) 692-5722 |
| Flood Control | (805) 568-3440 |
| Health Department | (805) 681-5489 |

**9230.21.5 Ventura County**

| | |
|---|---|
| Emergency Services Office | (805) 654-5000 |
| Flood Control | (805) 654-2001 |
| Health Department | (805) 654-2813 |

**9230.21.6 Southern Sector**
**9230.21.7 Los Angeles County**

| | |
|---|---|
| Health Department | (213) 974-1234 |
| | (800) 427-8700 |
| Radiological Health | (213) 738-4059 |
| Flood control (24 HR) | (818) 458-4357 |

**9230.21.8 Orange County**

| | |
|---|---|
| Control One (Emergency Services) | (714) 834-7200 |
| Health Department | (714) 834-7700 |
| Radiological Health | (213) 580-5712 |
| Flood Control | (714) 567-6371 |
| Environmental Health | (714) 667-3600 |

## 9230.3 Local Environmental Agencies

**9230.31.1 Northern Sector**
**9230.31.2 San Luis Obispo County**

| | |
|---|---|
| Air Pollution District | (805) 781-5912 |
| Environmental Health | (805) 781-4247 |
| Business | (805) 781-5544 |

**9230.31.3 Santa Barbara County**

| | |
|---|---|
| Air Pollution District | (805) 961-8800 |
| Environmental Health | (805) 681-4900 |
| Flood Control | (805) 568-3440 |
| Public Health | (805) 681-5250 |

**9230.31.4 Ventura County**

| | |
|---|---|
| Air Pollution District | (805) 645-1400 |
| Environmental Health | (805) 654-2813 |
| Flood Control | (805) 654-2001 |
| Public Health | (805) 652-5918 |

**9230.31.5 Southern Sector**
**9230.31.6 Los Angeles County**

| | |
|---|---|
| Environmental Health | (213) 240-8236 |
| Public Health | (213) 240-8234 |
| Flood Control | (213) 226-4178 |

#### 9230.31.7 Orange County

| | |
|---|---|
| Environmental Health | (714) 667-3600 |
| Public Health | (714) 834-7700 |
| Flood Control | (714) 834-6192 |
| South Coast Air Quality Mgmt. Dist. | (909) 396-2000 |

### 9230.4 Law Enforcement Agencies

| | |
|---|---|
| American Protective Services | (562) 427-2737 |
| | (714) 963-6679 |
| API | (714) 971-0958 |
| Air Sea Land | (310) 539-0202 |
| | (800) 626-2166 |

#### 9230.41.1 Northern Sector

#### 9230.41.2 State Police

| | |
|---|---|
| CA Highway Patrol | |
| (Ventura) | (805) 654-4578 or |
| (San Luis Obispo) | (805) 549-3092/93/94/95 |

#### 9230.41.3 Sheriffs Departments

| | |
|---|---|
| Santa Barbara County | |
| (Dispatch) | (805) 683-2724 |
| (Business) | (805) 681-4100 |
| San Luis Obispo County | (805) 781-4550 |
| Ventura County (Business) | (805) 654-2311 |

#### 9230.41.4 Local Police

| | |
|---|---|
| Carpinteria (SB Co Sheriff) | (805) 684-4561 |
| Grover Beach Police Dept. | (805) 473-4511 |
| Lompoc Police Dept. | (805) 736-2341 |
| Morro Bay Police Dept. | (805) 772-6225 |
| Oxnard Police Dept. | (805) 385-7600 |
| Pismo Beach Police Dept. | (805) 773-2208 |
| Port Hueneme Police Dept. | (805) 488-3611 or |
| | 986-6530/6538/6539 |
| Santa Barbara City Police | (805) 897-2300 |

| | |
|---|---|
| Ventura Police Dept. | (805) 339-4400 |
| Waterfront Dept (Business) | (805) 564-5520 |
| (Harbor Patrol) | (805) 564-5530 |

**9230.41.5 Southern Sector**
**9230.41.6 State Police**

| | |
|---|---|
| California Highway Patrol | (213) 744-2331 |
| California State Police | (213) 620-4700 |

**9230.41.7 Sheriffs Departments**
**9230.41.8 LA County**

| | |
|---|---|
| Sheriff's Department (Carson) | (310) 830-1123 |

**9230.41.9 Orange County**

| | |
|---|---|
| Sheriff's Department (Norwalk) | (714) 994-2970 |

**9230.41.10 Local Police**
**9230.41.11 Los Angeles County**

| | |
|---|---|
| Torrance Police | (310) 328-3456 |
| Hermosa Beach Police/Fire | (310) 372-5022 |
| Long Beach Police | (562) 590-7260 |
| Malibu (LA County Sheriff) | (310) 456-6652 |
| Manhattan Beach Police | (310) 545-5621 |
| Marina Del Rey (LA County Sheriff) | (310) 823-7762 |
| Palos Verdes Estates Police | (310) 378-4211 |
| Playa Del Rey (LAPD) | (310) 202-4502 |
| Rancho Palos Verdes (Co. Sheriff) | (310) 539-1661 |
| Redondo Beach Police | (310) 379-5411 |
| San Pedro (LAPD) | (310) 548-7605 |
| Santa Monica Police | (310) 395-9931 |
| Torrance Police | (310) 618-5641 |
| Venice (LAPD) | (310) 202-4502 |

**9230.41.12 Orange County**

Dana Point and Capistrano Beach

| | |
|---|---|
| (Orange County Sheriff) Dispatch | (714) 723-1000 |
| Business | (714) 248-2222 |
| Huntington Beach Police Dept. | (714) 960-8843 |
| Laguna Beach Police Dept. Dispatch | (714) 497-0717 |
| Business | (714) 497-0701 |

| | |
|---|---|
| Newport Beach Police Dispatch | (714) 644-3711 |
| Business | (714) 644-3717 |
| San Clemente Police | (714) 361-8201 |
| Seal Beach Police | (562) 431-2541 |

**9230.41.13 Port Authority/Harbormaster**

**9230.41.14 Northern Sector Harbor Departments**

| | |
|---|---|
| Channel Islands Harbor. (in Oxnard) | (805) 382-3001 |
| Ventura Harbor Dept. | (805) 642-8618 |
| Morro Bay Harbor Dept. | (805) 772-6254 |
| Port San Luis Harbor Dept. | (805) 595-5400 |
| Harbor Patrol | (805) 595-5435 |
| Santa Barbara Harbor Dept. | (805) 564-5529 |

**9230.41.15 Southern Sector Harbor Departments**

**9230.41.16 Los Angeles County**

| | |
|---|---|
| Long Beach Marina | (562) 437-0041 |
| Redondo Beach Harbor Department | (310) 318-0632 |
| Port of Long Beach | (562) 590-4185 |
| Port of Los Angeles | (310) 519-3500 |
| Santa Monica Harbor Department | (310) 458-8694 |

**9230.41.17 Orange County**

| | |
|---|---|
| Dana Pt Harbor Patrol | (714) 248-2222 |
| Newport Bay Harbor Department | (714) 723-1002 |

**9230.41.18 Fire Departments**

**9230.41.19 Northern Sector**

**9230.41.20 Ventura County**

| | |
|---|---|
| Avila Beach Fire District | (805) 595-2009 |
| 24-Hour | (805) 543-4242 |
| California Dept of Forestry and Fire Protection | |
| | (805) 543-4244 |
| 24-Hour | (805) 543-4242 |
| Cambria Fire District 24 Hour | (805) 543-4242 |
| Carpenteria-Summerland Fire | (805) 684-4591 |
| Cayucos Fire District | (805) 995-3372 |
| 24-Hour | (805) 543-4242 |
| Grover Beach Fire Dept | (805) 473-4590 |
| 24-Hour | (805) 473-4511 |

| | |
|---|---|
| Montecito Fire District | (805) 969-7762 |
| Morro Bay Fire Department | (805) 772-6242 |
| 24-Hour | (805) 772-6225 |
| Oceano Fire Department | (805) 481-6730 |
| Oxnard Fire Dept. | (805) 385-7740 |
| Fire emergency | (805) 487-6311 |
| Pismo Beach Fire Department | (805) 773-7031 |
| 24-Hour | (805) 773-2208 |
| Ventura County Fire Dept. | (805) 495-2115 |
| San Luis Obispo County Fire | (805) 543-4244 |
| 24-Hour | (805) 543-4242 |

**9230.41.21 Santa Barbara County**

| | |
|---|---|
| Fire Dept. | (805) 681-5500 |
| Santa Barbara City Fire Department | (805) 965-5254 |

**9230.41.22 Southern Sector**

**9230.41.23 Los Angeles County**

| | |
|---|---|
| Avalon Fire Department | (310) 510-0203 |
| El Segundo Fire Department | (310) 322-4412 |
| Hermosa Beach Fire Department | (310) 318-0313 |
| Dispatch | (310) 376-2479 |
| LA County Fire Department | (213) 262-2111 |
| (inc. Marina Del Rey and Palos Verdes) | |
| LA Fire Station 49 (Boats 3 & 4) | (310) 548-7549 |
| LA Fire Station 112 (Boat 2) | (310) 548-7542 |
| Long Beach Fire Department | (562) 436-8211 |
| Manhattan Beach Fire Department | (310) 545-5625 X256 |
| Redondo Beach Fire Department | (310) 379-5416 |
| Santa Monica Fire Department | (310) 458-8671/8660 |
| Torrance Fire Department | (310) 328-3131 |
| Wilmington Fire Department | (310) 548-7531 |

**9230.41.24 Orange County**

| | |
|---|---|
| Costa Mesa Fire Department | (714) 536-5411 |
| Dana Point (County Fire Dept.) | (714) 538-3501 |
| Business | (714) 744-0455 |

| | |
|---|---|
| Huntington Beach Fire Department | (714) 536-5471 |
| Laguna Beach Fire Department | (714) 497-0356 |
| Newport Beach/Corona Del Mar | (714) 644-3103 |
| Orange County Fire Department | (714) 538-3501 |
| San Clemente Fire Department | (714) 538-3506 |
| | (714) 288-6472 |
| Seal Beach Fire Department | (714) 538-3501 |
| Seal Beach Naval Weapons | (562) 594-7280 |

## 9230.5 Hazardous Substances Response Teams

### 9230.51.1 Introduction

This section is intended to identify existing regional and local planning for obtaining hazardous material emergency response resources. The State's Fire and Rescue Mutual Aid System was developed through the cooperation of every segment of California's Fire Service. To maintain system integrity, local fire officials are actively involved in day-to-day system management and operation.

Region I Local Emergency Planning Committee (LEPC) as specified by SARA Title III is comprised of Orange, Los Angeles, Ventura, Santa Barbara, and San Luis Obispo counties.

### 9230.51.2 Background

The S.A.F.E. Act, authored by Assemblywoman Bev Hansen (8th District), became law on January 1, 1988. The Office of Emergency Services (OES) has promulgated rules and regulations governing the programs created by the S.A.F.E. Act, in California Code of Regulations, Title 19 Section 2800 et. seq.

The S.A.F.E. Act authorizes the director of OES to implement and operate two different programs, both designed to assist local agencies particularly those local agencies in rural areas of the state in acquiring firefighting vehicles and related equipment. The Director has delegated the management of these programs to the Fire and Rescue Branch of OES.

Neither the LEPC nor OES has a stockpile of specific resources such as skilled manpower, specialized equipment, or supplies for hazardous materials emergencies.

The Region I response organization is comprised of all local government jurisdictions, special districts, and private facilities which have capabilities to respond to hazardous materials emergencies. In addition, state and federal agencies that have appropriate statutory authority for such emergencies may be called on. Other state agencies and organizations that have special capabilities, or authorities, are called as the situation warrants.

Region I hazardous materials emergency response operations are based in existing OES mutual aid principles. The system works in the following manner:

When an emergency has exceeded the city's capability, it makes a request to the operational area (county) for assistance.

1. The operational area will draw on resources from other cities, as well as providing its own county resources.

2. When an emergency threatens to exceed a county's capability, mutual aid assistance is requested from the region.

3. OES Region I will look for assistance from other counties within the region.

4. If adequate resources are not available, the OES Headquarters will be requested to obtain the needed assistance from throughout the state and the federal government.

Certain conditions must exist and procedures followed in order to activate the Regional and State plans. These are described in Section V of Region I Plan. The actual amount and type of equipment that is available from each local agency is listed in the Fire and Rescue Mutual Aid System Resources Directory.

**9230.51.3 Resources**
The following is a list of federal and state contacts:

**9230.51.4 Federal**
**9230.51.5 U.S. Coast Guard:**
Marine Environmental Response 310-521-3780

24 hr number 310-521-3801

National Response Center: 800-424-8802

**9230.51.6 Environmental Protection Agency:**
Hazardous Materials 415-744-1305

San Francisco – 24 hr number 415-744-2000

**9230.51.7 Department of Energy:**
Emergency Duty Officer 702-295-3343

**9230.51.8 State**
**9230.51.9 State Office of Emergency Services:**
Hazardous Materials Planning 916-262-1621

Warning Control Center 800-852-7550

**9230.51.10 Cal State EPA;**
Department of Toxic Substance Control:

General number 818-551-2800

After hrs. use OES/Warning Control Center

**9230.51.11 California Highway Patrol:**
Major incidents 213-736-3317

Chemical and Medical Information:

Toxic Info Center 800-404-4646

### 9230.51.12 Resource Reference Documents

Fire and Rescue Mutual Aid System (revised 4/88)

Fire and Rescue Mutual Aid System Resource Directory (revised 3/94)

Region I LEPC Emergency Plan (draft revision 2/97)

Fire Service Field Operations Guide ICS 420-1 (revised 10/94)

Oil Spill Field Operations Guide ICS-05-420-1 (revised 6/96)

### 9230.51.13 Private Hazardous Material Response Resources

Private organizations include chemical mutual-aid organizations, individual companies with response units, and information sources. The private response/cleanup contractors are listed by response capabilities as defined by FIRESCOPE California's Hazardous Materials Company Types and Minimum Standards.

### 9230.51.14 Commercial

Advanced Cleanup Technologies, Inc.
Type 1 & 2 800-334-2284

ANCON Marine
Type 1 & 2 310-548-8300

FOSS Environmental Services, Inc.
Type 1 & 2 562-432-1304

Ocean Blue
Type 2 only 310-624-4120

### 9230.51.15 Industry Specialized

CHEMTREC: Emergency 800-424-9300; Non-emergency: 1-800-262-8200

CHEMTREC is a 24-hour public service of the Chemical Manufacturers' Association; can provide:

(1) Immediate emergency action information for spill, leak, exposure, or fire control measures;

(2) Precautionary information;

(3) Assistance in identification of a hazardous substance if the manufacturer is known or if shipping
papers are present; and,

(4) Immediate notification of manufacturers or shippers through their emergency contacts or notification of industry mutual-aid networks.

(5) Info from the National Poison Antidote Center (NPAC) with immediate information of most known poisons and communications to all major hospitals.

(6) Contact with the chemical manufacturer for detailed technical information, and, in some cases,
activation of the manufacturer's response team.

(7) Contact with carriers for technical information, waybill or cargo manifest printouts, and some carriers
can assist with chemical- and wreckage-removal operations.

(8) Contact with the Chlorine Emergency Plan (CHLOREP) is organized by the Chlorine Institute, it is activated by CHEMTREC.

CHEMTEL: will provide services similar to CHEMTREC; 800-255-3924 (24hrs).

AMERICAN CYANAMIDE: will assist and provide information on their products; 201-835-3100 (24-hrs).

BASF WYANDOTTE: will provide information on their products; 313-282-3300.

DOW CHEMICAL CO.: will assist and provide information on their products, advice available for chlorine incidents; 517-636-4400.

DU PONT: will assist and provide information on their products, advice and response available for chlorine and hydrogen fluoride incidents on or off site; 302-774-7500

NATIONAL AGRICULTURAL: will provide information on CHEMICALS ASSOCIATION pesticides; 513-961-9300.

NATIONAL PESTICIDE TELECOMMUNICATION NETWORK: will provide information on most pesticides, herbicides, and fungicides; 800-858-7378 (0630-1630 PST, 7days/week).

UNION CARBIDE: will assist and provide information on their products; 212-551-2345.

#### 9230.51.16 Explosive Ordinance Detachments (EOD)

U.S. Navy Explosive Ordinance Disposal

U.S. Naval Station Point Mugu (805) 989-7698

Also contact local Police Departments

### 9230.6 Site Safety Personnel/Health Departments

## 9240 Private Resources

### 9240.1 Clean-up Companies (BOA & Non-BOA)

### 9240.2 Media (Television, Radio, Newspaper)

### 9240.3 Fire Fighting/Salvage Companies/Divers

For firefighting services refer to Section 9230.6 of this Plan

Antone Sylvester Tug Service, Inc. (805) 772-7833
501 Embarcadero St.
Morro Bay, CA 93442

Associated Divers (805) 772-7472
495 Embarcadero St.
Morro Bay, CA 93442

Commercial Diving (310) 834-2501

CNO Washington, D.C. (703) 602-7527

| | |
|---|---|
| Crowley Towing and Transportation<br>101 California Street<br>San Francisco, Ca 94111 | (415) 546-2500 |
| Fred Devine Diving and Salvage<br>6211 North Ensign<br>Portland, Or. | (503) 283-5285 |
| Global Diving and Salvage<br>Seattle, Wa. | (206) 623-0621 |
| Global Phillips | (703) 607-2758 |
| NAVSEA/SUPSALV<br>NAVSEA Bldg 508<br>Rough & Ready Island<br>(After Hrs Contact<br>NAVSEA Wash. D.C.) | (202) 267-2100 |
| International Diving<br>Stockton, Ca 95203<br>741 Arcturus Ave.<br>Oxnard, CA 93033 | (805) 488-6428 |
| Oceaneering International Inc.<br>116 E. Yanonali St.<br>Santa Barbara, Ca 93101 | (805) 963-6507 |
| Pacific Environmental Corp.<br>618 Pilchard St., Dockside<br>Terminal Island, CA 90731 | (213) 547-0031 |
| Salty Dog Dive Service | (805) 962-9009<br>(805) 689-3795 |

| | |
|---|---|
| Sea Tech Diving | (805) 683-6641 |
| SMIT Salvage/North America | (409) 744-5238 |
| Solus Ocean Systems | (310) 834-2501 |
| Submarine Engineering | (714) 673-5577 |
| U.S. Coast Guard<br>Marine Safety<br>Center Salvage Team<br>400 7th St. SW 24 Hr.<br>Washington, D.C. 20590-0001 | <br>(202) 366-6480<br>(202) 267-2100 |
| Wright-Way Hull | (714) 840-777 |

### 9240.4 Fishing Cooperatives and Fleets

| | |
|---|---|
| Morro Bay Commercial Fisherman's Association – Mayor Kathy Novak | (805) 772-4893 |
| Port San Luis Commercial Fisherman's Fisherman's Association | Channel 16 |
| Joint Oil/Fisheries Liaison (FORT) – Central Coast<br>Craig Fusaro | (805) 963-8819 |
| Fisherman's Cooperative | (310) 832-5377 |

### 9240.5 Wildlife Rescue Organizations

| | |
|---|---|
| Animal Rescue Care Center | (805) 579-8047 |
| Audubon Society | (213) 876-0202 |
| California Marine Mammal Center | (415) 788-9100 |
| Central Coast Wildlife Rehabilitation Guild | (805) 543-9453 |

| | |
|---|---|
| International Bird Rescue & Rehabilitation Center | (510) 841-9086 |
| Marine Mammal Center | (805) 687-3255 |
| Oiled Wildlife Care Network (CA Dept. of Fish & Game/OSPR) | (916) 445-0045 |
| Pacific Wildlife Care | (805) 543-9453 |
| Santa Barbara Wildlife Care Network | (805) 966-0023 |
| Ventura County Animal Regulation | (805) 388-4341 |

**9240.6 Volunteer Organizations**

| | |
|---|---|
| Animal Rescue Center | (805) 579-8047 |
| Audubon Society | (213) 876-0202 |
| California Marine Mammal Center | (415) 289-SEAL |
| Friends of the Sea Lion Marine Mammal Center | (714) 494-3050 |
| Friends of the Sea Otters | (402) 375-2278 |
| International Bird Rescue & Rehabilitation Center | (510) 841-9086 |
| Marine Mammal Center | (805) 687-3255 |
| Pacific Wildlife Care | (805) 543-9453 |
| Rehabilitation Guild | (805) 489-0411 |
| Santa Barbara Wildlife Care Network | (805) 966-0023 |
| Ventura County Animal Regulation | (805) 654-2263 or (805) 654-5000 |
| University of California, Irvine (Marine Biology Department) | (714) 856-6031 |
| University of California Santa Barbara (Marine Biology Dept.) | (805) 568-3320 |

**9240.7 Maritime Associations/Organizations/Cooperatives**

| | |
|---|---|
| Chevron El Segundo Pilots Capt. Harvey Portz | (310) 983-3665 |
| Jacobsen Pilots/Pilot Station Capt. Graham (562) 435-5435 | (562) 432-0664 |

| | |
|---|---|
| LA Pilots | (310) 732-3805 |
| Capt. Pearce | |
| Oxnard Wharfingers | (805) 488-4615 |
| Port Hueneme Pilots Assn. | (805) 984-4933 |
| Capt. Dingler, Capt. Harvey | |
| Port Hueneme Navy Pilots | (805) 982-5107 |
| Capt. Fosse | |
| Port Services | (805) 982-3121 |
| Port Hueneme Pilots Assoc. (2 pilots) | (805) 984-4933 |
| P.O. Box 1651 | |
| Port Hueneme, CA 93041 | |
| West Coast Pilots Ass. | (805) 984-4933 |
| Larry Patasini | |
| (handles offshore moorings except El Segundo) | |

### 9240.8 Marine Surveyors

| | |
|---|---|
| Anchorage Marine Surveyor | (562) 598-7771 |
| American Marine Surveyors, Inc. | (805) 644-9330 |
| Anderson Int'l Maritime Consulting | (805) 737-3770 |
| Bud Trettor Marine Surveyors | (310) 834-3413 |
| Captain M. L. McGee | (310) 518-1825 |
| J. A. Jacobson & Associates | (310) 834-4553 |
| Maritime Surveyors | (805) 984-8889 |
| | (805) 646-1741 |
| Pager | (805) 531-4264 |
| Oxnard Wharfingers | (805) 488-4615 |
| Stangeland Marine | (310) 544-1288 |

### 9240.9 Southern Sector – Marine Pilots

| | |
|---|---|
| Chevron El Segundo Pilots | (562) 983-3665 |
| Jacobson Pilots | (562) 432-0664 |
| Long Beach | |
| LA Pilots | (310) 519-3805 |

### 9240.10 Academic Institutions

| | |
|---|---|
| California State University Fullerton | |
| Dr. Steven Murray (Coastal Marine Ecology) | (714) 278-7291 |
| California Polytechnic State University, | (805) 756-2788 |
| San Luis Obispo (Biological Sciences Department) | |
| University of California, Irvine | (714) 856-6031 |
| (Marine Biology Department) | |
| University of California Santa Barbara | (805) 893-3764 |
| Barbara (Marine Biology Dept.) | |

### 9240.11 Laboratories

| | |
|---|---|
| ABC Laboratories | (805) 643-5621 |
| Aquatic Testing Labs | (805) 650-0546 |
| FGL Environmental | (805) 659-0910 |
| Applied Microbiological | (562) 595-7576 |
| Consolidated Laboratories | (818) 915-8991 |
| Chemtek Environmental Labs | (562) 926-9848 |

### 9240.12 Emergency Medical Services

Refer to Section 5320 of this Plan

## 9250 Stakeholders

### *9300* Draft Incident Action Plan (IAP)

Refer to Section 4002.08 of the REGIONAL CONTINGENCY PLAN.

## *9400* Area Planning Documentation

### 9410 Introduction

Oil and the South-Central California coast share a lengthy and intertwined history, reaching back millions of years. For at least several thousand years, this relationship has benefited humans, first when oil seeps were used as a key ingredient in quap, a popular sealant used among early Chumash inhabitants and traded far inland, then later in the form of tar asphalt, fuel oil, and gas. Today, as oil emerges from the geologic depths of this region, then travels via pipeline and tanker to inland processing facilities, it has become a permanent fixture. Moreover, due to their geographic location, California's South-Central shores have become the shoulder of a massive oil tanker highway used to ferry oil from as far north as Prudhoe Bay and as far south as Argentina. As modern inhabitants of the region seek to balance the needs of an oil-hungry nation with the delicate ecostructure of the region, a cursory glance suggests that this area will continue to remain a microcosm of commercial versus environmental struggles.

#### 9410.1 Possible Sources of Oil Spills

#### 9410.2 Seep History

The earliest European accountings of area oil seepage dates from 1543 when Spanish explorer Juan Rodriguez Cabrillo caulked his ships with the locally available tar. A 1793 log entry from Captain George Vancouver states, "...as far as the eye can see, the sea is covered with a sticky smelly substance." Over a period of several decades, an extensive, seaside asphalt mine was operated on the present-day site of the University of California Santa Barbara campus, scene of the 1886 traveler's description. Boaters knowledgeable of the Coal Oil Point area often avoid the local kelp beds, where natural, floating tar concentrates before being washed onto the shoreline; the tar frequently stains boat hulls and sticks to marine gear in the water. One 1970 study published in Science magazine by Alan A. Allen, et. al., estimates the daily release of 50-70 barrels per day in this area alone.

Owing to the geologic structure of the Central Coast, there is little doubt that petroleum seepage has been a long-term phenomenon, predating human habitation in the area. Aside from intensive mining activity, which began in the 1800, natural petroleum seepage continues today. Seepage is most concentrated near Coal Oil Point; however, it extends throughout the area. Of the 50+ oil seeps know to exist along the Southern California coast between Point Arguello and Huntington Beach, at least 38 of these exist within the Ventura-Santa Barbara geologic basin. The occurrence of submarine oil seeps north of Point Arguello has not been established.

#### 9410.3 Offshore Platform Development Today

At this writing, some twenty platforms are in operation between Point Conception and Point Mugu; three platforms (Harry, Helen, and Herman) have been abandoned and removed. Active platforms include (in alphabetical order): "A", "B", "C", Gail, Gilda, Gina, Grace, Habitat, Harmony, Harvest, Henry, Heritage, Hermosa, Hidalgo, Hillhouse, Hogan, Holly, Hondo, Houchin, and Irene. Nineteen ninety-three and 1992 surveys by the U.S. Department of Interior, Minerals Management Service provide total average daily production figures for all offshore platforms in the Santa Barbara Channel. For both years, crude oil figures range between 121,501 (October 1992) and 145,131 (September 1993) barrels of oil per day. For natural gas, figures vary between 123,056 (August 1993) and 156,020 (February 1993) mean cubic feet per day. In addition, tremendous quantities of

water are extracted, ranging from 104,742 (January 1993) to 122,305 (August 1993) barrels of water per day.

### 9410.4 Onshore Facilities

Although this plan deals primarily with marine oil spills, recent spill events at Unocal's Guadalupe facility and McGrath State Beach near Carpinteria have greatly underscored the potential impact of shore side spillage upon open water areas.

### 9410.5 Onshore Pipelines

The first pipelines built in the northern sector date from 1906, when a 6-inch line was completed between the Santa Maria oil fields and Port San Luis by Union Oil. The same year, Port San Luis was officially designated a Port of Entry. Three years later, an 8-inch pipeline was added between the San Joaquin Valley and Avila; Union Oil also completed a pier the same year. Several years earlier in 1897 a dual, thirty-seven mile pipeline had been constructed to the south between Sisquoc and Alcatraz Landing near present-day Gaviota. A 4-inch line was used to convey asphaltum dissolved in naptha from the Sisquoc area to a beachside refinery where the naptha was removed; the naptha was returned inland via a 2-inch line. After refining, the asphalt was conveyed to a wharf and transferred to ships. Further to the south in Ventura County, lines generally connected to the already existent San Joaquin Valley oil pipeline network.

Pipelines gradually enlarged over subsequent decades, following established routes, as increasing volumes of coastal oil flowed from the area. As offshore platforms began adding to the volume--most particularly oil flowing from the Point Arguello field--it became necessary to significantly increase pipeline throughput. In 1985, the Celeron Pipeline Company of California (a subsidiary of Goodyear Tire Corp.) began construction on a 30-inch pipeline to link South-Central coast oil with Freeport, Texas refineries in the Gulf Coast. A coastal segment was also constructed to link Gaviota with the Las Flores Canyon facility. This pipeline officially entered Santa Barbara County in May, 1986. On May 31, 1989, the Celeron Pipeline Company of California merged with the All American Pipeline Company; subsequently, the pipeline has been designated the "Celeron/All American."

### 9410.6 Offshore Pipelines

The Point Arguello oil field, serviced by a triad of platforms (Hidalgo, Harvest, and Hermosa), is connected via two, 10-mile pipelines to the Gaviota Oil and Gas Plant. These pipelines make their landfall at Point Conception, then run for 17 miles to the Gaviota facility. To accommodate environmental requirements, the pipelines were constructed through holes drilled slantwise from the Point Conception bluffs at an elevation of 100 feet; these holes enter the ocean about 1,000 feet offshore. A 24-inch diameter line transports up to a quarter-million barrels per day of oil-water mixture from the Point Arguello field; the other line (20-inch diameter) transports up to 160 MMscf of gas per day.

East of Gaviota, offshore pipelines generally run between individual platforms and the coastal segment, being buried several feet below the beach at their landfalls. It is also normal practice to bury pipelines along the ocean floor in areas where they may be prone to damage from boat anchors and moorings. This does not, however, guarantee safety, as was seen in 1992 when a service boat, while attempting to grapple for a lost mooring chain near Platform Gina, accidentally grappled the pipeline instead, then caused a major rupture on the platform's riser; some 3,000 gallons of crude were spilled during the incident.

### 9410.7 Transfer Terminals

The following terminals operate in the South-Central Coast region:

Cojo Bay Offshore Marine Terminal (inactive), Orcutt

Chevron El Segundo, El Segundo

Ellwood Marine Terminal, Coal PointS.C.E. Mandalay Station (Offshore Marine Facility), Oxnard

Ventura Petroleum Mobile Facility, Ventura

S.C.E. Port Hueneme Marine Transfer Facility, Oxnard

Tesoro Marine Transfer Facility, Oxnard

Black Gold Mobile Facility, Oxnard

General Petroleum Resources Mobile Facility, Ventura

Gallighen Mobile Facility, Ventura

Pacific Construction and Maintenance Mobile Transfer Facility,

Santa Paula

Unocal Mobile Transfer Facility, Ventura

Pacific Petroleum Mobile Transfer Facility, Orcutt

Gaviotta Marine Terminal, Goleta

Unocal Avila Marine Terminal, San Luis Obispo

Some of the higher-volume facilities are discussed below:

Gaviota Marine Terminal: One of the region's largest facilities is the Gaviota Marine Terminal, located offshore from the Gaviota processing facility. Originally designed to service up to 196 tankers per year, this facility is a joint venture including Chevron, Exxon, Phillips and other subsidiary investors. It includes a 46-acre onshore site, and was originally intended as a temporary measure until an adequate pipeline (All American, Co.) could be constructed to handle the large offshore oil field volumes.

Amid local political controversy, Chevron was granted a temporary tankering permit by the Santa Barbara County Board of Supervisors in May 1989; however, the permit was revoked by the California Coastal Commission. Chevron then attempted to land a permanent tankering permit; however, their request was denied by the Santa Barbara County Board of Supervisors on November 12, 1990 due to environmental concerns. Chevron appealed the decision, but six months later (April 19, 1990) their appeal was denied. A legal battle ensued, and Chevron filed a $100 million lawsuit against Santa Barbara County, culminating in a public hearing April 6, 1992. The County voted to allow Chevron a 20 month trial period for tankering, under the condition that a binding contract would be signed with a pipeline company to take over transport of all oil by January 1, 1996. On August 9, 1993, the first tanker (the Chevron Oregon) moored at the facility. Meanwhile, the volatile, on-again/off-again political battle has continued.

Ellwood Marine Terminal: Three-quarters of a mile northwest of Coal Oil Point lies the Ellwood Marine Terminal, an oil marine terminal and storage facility for handling high-sulfur crude from Platform Holly, PRC 421 and the Dos Pueblos tract lease. The facility's maximum throughput is 10,000 bbl per day. Twenty-six thousand feet offshore, the Barge

Jovalan, processing barge is moored in 60-foot deep waters and receives oil approximately twice per month. The barge has a load limit of 55,000 bbl with each mooring evolution (mooring, connection, loading, departure) requiring approximately 17 hours.

Unocal Avila Marine Terminal and Tank Farm: The Avila marine terminal is located in the San Luis Bay within the jurisdiction of the Port San Luis Harbor District and is owned and operated by Unocal. The tank farm and pump station are located on the bluff south and above Avila Beach. The tank farm includes 15 above ground storage tanks, capable of storing over 2 million barrels of petroleum materials. The pump station includes a pump and a boiler house which shelter machinery used to pump and heat the petroleum materials as they pass through the pipelines.

### 9410.8 Tanker Traffic

The 1989 Marine Emergency Management Study (MEMS) published by the Santa Barbara County Energy Division summarizes multiple traffic studies on vessels transiting the Santa Barbara Channel. The channel is bisected along its midline by a northwest-to-southeast traffic separation lane used by larger vessels (generally freighters and small-to-medium tankers), and crisscrossed by numerous smaller vessels (e.g., pleasure craft, service vessels for oil platforms and islands, fishing boats, etc.). The study extrapolates traffic trends among large vessels transiting the Channel based upon four previous studies and 1989 figures from the Marine Exchange.

A 1977 estimate completed by John J. Mullen Associates, Inc. for the California Public Utilities Commission projected a nominal 6 percent decrease in Channel traffic, with a possible maximum increase of 20 percent by the year 2000. In contrast, a 1981 report by the National Maritime Research Center (NMRC) projected a 17-40 percent increase. The 1977 study cited traffic (for vessels over 100 tons) at approximately 14 vessels per day in the 1974-1976, increasing to a possible maximum estimate of 17.1 vessels per day by the year 2000. The 1981 study projected vessel traffic for the year 2000 at as many as 43 vessels per day; however, the MEMS study observes that "factors used by the authors of the [1981] NMRC study to predict increases have not occurred."

The MEMS report also includes two other, more recent studies in its study of Channel traffic. A 1984 study by the California Maritime Academy for the California Coastal Commission entitled, Santa Barbara Vessel Traffic Study, monitored northbound vessels transiting the Channel traffic land between 01 March 1983 and 14 May 1983. In this study, northbound traffic averaged 10.8 vessels per day. In 1984, the Santa Barbara County Air Pollution Control District prepared an Air Quality Attainment Plan; this plan projected vessel traffic in the Channel to a 1995 figure of between 40 and 55 vessels per day.

It is important to note that while the 1977 study identified its subject pool as vessels over 100 tons, the MEMS report does not make this clarification in citing other studies; therefore, vessel figures may be somewhat ambiguously compared. Based upon the extrapolated information in all the reports cited, and using data from the Marine Exchange, however, the MEMS report makes the following observations:

Our analysis indicated total vessel traffic in the Channel for 12987 was approximately 8070, or 22.1 vessels per day. Of these 84% were sailed under foreign flag, 16% under US flag. Twelve percent of the vessels transiting the Channel were tankers, 84% cargo ships, and 2% were barges. In addition to transiting traffic, there were approximately 190 marine tankers calling at Santa Barbara County marine terminals; these tankers essentially make two trips through the Channel- an ingress trip and an egress trip - and

were therefore doubled to reflect [the] actual trips through the Channel. This brings the grand total for Santa Barbara Channel traffic to 8458 vessels/year, or 23.2 per day. Of the total vessels, 16% were tankers.

Anecdotal information from VTS personnel suggest a trend among increasing numbers of large tanker vessels to avoid the Santa Barbara and Channel Islands region altogether, rerouting their passages further offshore to-from Los Angeles-Long Beach Harbor to use traffic separation lanes southwest of the Harbor. This has not been formally verified, however.

## 9420 Discharge and Release History

### 9420.1 Northern Sector

#### 9420.11.1 Santa Barbara Oil Spill of 1969

Volumes have been written about the 1969 Santa Barbara oil spill. This single spill event has been cited by more than one historian as the starting point of a global environmental "movement" which continues today. Although the event is comparable to numerous other environmental disasters, it occurred at a time when environmental awareness was mounting, and at a location only hours from several, worldwide media headquarters in Los Angeles. As images of oil-soaked birds and beaches were beamed around the world, Congress was charged to enact the Federal Water Pollution Control Act, the National Environmental Policy Act, and to toughen standards in the Outer Continental Shelf Lands Act of 1970. In 1972, California voters approved Proposition 20, establishing the California Coastal Commission. The political landscape regulating oil interests in the South-Central region--indeed throughout the U.S. Continental Shelf--would be changed forever.

Union Oil and its three partners, Texaco, Mobil and Gulf, had paid $61.4 million to lease 5,400 acres in the Santa Barbara Channel, including the tract where the incident on Platform "A" occurred. On January 28, 1969, Platform "A", constructed in 190 feet of water only months before, experienced a major blowout during a drill bit change-out. Large amounts of oil, gas, and mud roared up the well pipe, spewing onto the deck of the platform until the well was capped on February 7 with 13,000 barrels of heavy drilling mud. Unfortunately, because the well had been cased only to a depth of 238 feet, oil and gas breached the well several hundred yards from the platform, then continued to find its way through natural seeps for the remainder of the year. Initially, oil was released at a rate of 5,000 barrels per day, creating a 25-square mile slick the first day alone. By March 3, oil release was reduced to 5-10 barrels per day. By the end of the year, subterranean pressure was reduced through neighboring wells, largely "turning off" the bulk of seepage and mitigating the spill. Figures on the total size of the spill are inconclusive; however, estimates range between 33,000 and 100,000 barrels of oil. In size, the Santa Barbara Oil Spill of 1969, ranks as the seventh largest oil spill in U.S. history.

During and after the spill, Platform "A" oil was detected from Pismo Beach to as far south as Mexico. The majority of the spill fell upon local beaches and islands, affecting vessels, buildings and other facilities. Approximately 100 miles of beach were intensely impacted, covering numerous birds and intertidal organisms with oil. Estimates on birds killed by the spill vary widely; however, at least 3,700 were confirmed killed, with actual numbers probably much higher. By February 11, some 18,900 feet of boom had been deployed under poor-to-moderate weather conditions. Clean-up operations totaled over $4.5 million, encompassing 1,000 workers, 54 boats, and 125 pieces of mechanical equipment. Over 5,200 truckloads of oil debris were hauled to local landfills, including 3,000 tons of straw used as sorbent. Cleanup operations continued from January until August 15.

### 9420.11.2 USNS Private Joseph Merrell of 1973

On December 30, 1973, a Navy cargo ship, the USNS Private Joseph Merrell, was crippled by a collision at sea and was towed into Port San Luis for repairs. The ship was leaking fuel oil, about one barrel each mile, and created a 13 mile trail of fuel as it was towed in from an area about 40 miles north of Morro Bay. A helicopter located a 16,000-gallon spill moving south of Piedras Blancas and up to 12 miles offshore. The offshore spill was breaking up and did not reach shore.

The ship was moored about 1,000 yards off the Union Oil pier. Three to five thousand feet of Coast Guard owned oil containment boom has been placed around the vessel. The vessel continued to leak fuel oil into the bay while crews worked on stopping the leak and transferring the fuel oil. Department of Fish and Game biologists were on the scene to monitor wildlife and the shoreline. The biologists remained throughout the salvage operation.

On January 2, 1974, the spill from the Merrell drifted onto the beach two miles south of the Pismo Pier. Rough water had caused the oil to escape from the booms, which had been placed around the Merrell. Clean up crews from the Coast Guard and the Navy worked around the clock to remove oil soaked and remove a few birds that had been oiled.

### 9420.11.3 Ogden Challenger of 1979

On March 8, 1979, about 250 gallons of heavy crude overflowed from the tanker Ogden Challenger as it was being loaded at Estero Bay. One of the holding tanks was filled too high, causing the overflow. The spill occurred at 3:36 am and a 10-man Chevron crew began working to contain the spill about 15 minutes later. Sorbent pads were used to soak up 125 gallons of the crude according to Chevron. Shortly after noon the tide came in and washed oil onshore to the Morro Strand Beach. More than a dozen Chevron workers, a tractor and dump truck worked to clean up the oil-coated sand. No distressed wildlife was found by the Department of Fish and Game officials on the scene.

Pac Baroness/Atlantic Wing Collision of 1987

On September 21, 1987, twelve miles southwest of Point Conception, in foggy conditions, a collision occurred between the Panamanian freighter Atlantic Wing and the Liberian bulk carrier, Pac Baroness at position 34.21N, 120.45W. The Atlantic Wing was inbound toward Long Beach with a load of automobiles when its bow breached the number 4 and 5 cargo holds of the Pac Baroness, outbound from the Santa Barbara Channel Vessel Traffic Separation Scheme (VTSS). Although the Atlantic Wing was allowed to proceed to Long Beach under its own power, the Pac Baroness continued to take on water at an increasing rate until it sank some ten hours later at position 34.21N, 120.38W. The vessel was laden with 21,000 metric tons of dry bulk copper concentrate and had 386,000 gallons of oil aboard, including IFO 180, Marine Diesel Oil and Lubricating Oil. Aerial and surface observations based upon slick size color and coverage suggested an immediate discharge of 40,000 gallons.

By the next day, the resulting oil slick extended six miles south of the Pac Baroness's position. Much of the slick was naturally dispersed by choppy seas, with 250 gallons of dispersant (COREXIT 9527) being applied on September 24 to slick segments nearest the Channel Islands Marine Sanctuary. At the time of the accident, numerous birds and marine mammals were present on San Miguel Island, leading to serious concerns about environmental impacts. Fortunately, oil seepage from the Pac Baroness was minimal with estimates of continued seepage at less than one barrel per day. Had the vessel been a full laden oil tanker, its location near the Channel Islands Marine Sanctuary would have proved much more serious.

### 9420.11.4 Unocal Guadalupe Oil Field Spill

Commencing in 1986, serious charges from employees at Unocal's Guadalupe Oil Field alleged that large amounts of diluent, a solvent used to thin heavy crude petroleum, had been leaked throughout the shore side facility. The facility had begun using diluent when it opened in 1953, with leaks continuing until the winter of 1990. That year, a major spill became noticeable along the site's beachfront, forcing Unocal to publicly acknowledge the fact and cease its use of diluent; most oil production in that field ceased as well.

By 1993, after records were seized and well assays were conducted, the extent of the spillage was estimated at up to 8.5 million gallons over a thirty-seven year period. Much of the diluent was localized near the beach zone north of the Santa Maria River mouth; however, diluent was also detected floating atop ground water at a number of inland well sites. Unocal has initiated a number of cleanup measures, including removal and replacement of contaminated beach sand, building a subterranean retaining wall, well pumping, and the use of moisture and bacteria to break down soil-trapped diluent. Depending upon estimates, the Guadalupe Oil Field Spill ranks as between the seventh and fourth largest petroleum spill in U.S. history.

### 9420.11.5 Pipeline rupture at Avila Beach

On August 3, 1992, a pipeline ruptured at the Avila Beach marine terminal and released an estimated 150 barrels of heated San Joaquin heavy crude oil, which flowed down into the marine waters. This spill was the focus of a three-week, $11 million cleanup effort by the responsible party. The Coast Guard and state OSPR coordinated in the response effort with the on-scene coordinator. The spill provided several valuable lessons including the fact that sensitive cultural resources can be the focus of intense controversy if they are not treated with respect and dignity. Native Americans should be contacted immediately, and these sites should be protected when staging areas for response activities are selected.

## 9420.2 Southern Sector

### 9420.21.1 Tanker traffic and Vessel related spills

Vessel traffic off Orange and Los Angeles Counties passes through two traffic separation schemes (North and South) to and from the Ports of Los Angeles and Long Beach. From figures tabulated by the Marine Exchange, an average of 1,214 tankers arrive yearly into the ports. Of these ships approximately 30% are foreign. The Port of Long Beach tabulated that a total of 26 million metric tons of petroleum/liquid bulk products were transported within the port for 1992. The Port of Los Angeles tabulated approximately 22 million metric tons of petroleum liquid bulk products transported through the port. Petroleum cargos ranged from crude oil, gasoline, fuel oils, diesel, and jet fuel. Within Orange County there is an offshore mooring 1.3 miles off Huntington Beach that belongs to Golden West Refining Company. Although the Golden West Refinery is not in operation at this time, the mooring may still be used to receive crude for other refineries. Traffic into the mooring is sporadic and cannot be accurately predicted but, on average, anywhere from 20 to 30 tankers will visit the area within a year. The size of the tankers is limited by the 37-foot draft requirement at the mooring and, under the present offshore mooring operating guidelines, this can accommodate a cargo of approximately 360,000 barrels of product. All types of waterborne crude are transferred at this facility. The Golden West Refinery mooring is a perfect example of how any petroleum based activity, no matter how small, is a potential spill risk. Although the refinery traffic was, and is, minute in comparison to the Ports farther North, Golden West Refinery mooring was the site of the AMERICAN TRADER incident in February 1990. The 818-foot tanker grounded upon one of her anchors, possibly due to insufficient depth under the vessel's hull. Almost 5000 barrels of Alaskan North Slope Crude were rapidly released from the #1 starboard wing tank and spilled into the open waters.

The Coast Guard computer database, MSIS, can extract vessel spill information within prescribed latitudes and longitudes and for a dictated time period.

The vessel spill data from MSIS includes oil spills from all types of vessels, including tankers, pleasure craft, barges, cruise ships, and container ships. Information for this analysis was extracted for the following set of latitudes and longitudes:

| Latitude | Longitude | Date |
|---|---|---|
| 33-20.0 N 33-45.0 N | 117-35.0 W 118-00.0 W | Jan 88-Jun 91 |
| 33-40.0 N 34-00.0 N | 118-00.0 W 118-49.0 W | Jan 88-Jun 91 |

The first "square" covers from the Northern San Diego County line up to, and including, Huntington Beach. The second "square" extends from Huntington Beach to Point Dume.

San Mateo Point to Huntington Beach

| Amount(gallons) | Percent of Total Spills |
|---|---|
| 1-5 | 61% |
| 6-100 | 31% |
| 100 and over | 8% |

Total spills = 13

Huntington Beach to Point Dume

| Amount(gallons) | Percent of Total Spills |
|---|---|
| 1-5 | 63% |
| 6-100 | 33% |
| 100 and over | 4% |

Total spills = 216

**9420.21.2 Facilities and Facility Related spills**

The Oil and Hazardous Substances Planning and Response Considerations from NOAA and the 1991 Port Surveys, completed by the Coast Guard, are the references for this discussion. According to the former reference:

There are 19 bulk-liquid facilities identified in the Los Angeles area. Facilities found in this area include two chemical facilities and seventeen petroleum facilities. The largest facility by far in the port of Los Angeles is Mobil Oil, with a storage capacity of 2,072,600 barrels of petroleum products. There are nine bulk-liquid facilities present in the Port of Long Beach area, including three chemical facilities and six petroleum facilities. The largest facility in the port [Long Beach] is Four Corners Pipeline Company (ATSC) with a petroleum storage capacity of 2,569,000 barrels.

Table E-III-1 is an index from Response Considerations and lists the Los Angeles/Long Beach facilities that handle bulk chemical and petroleum products. Figures E-III-1 and E-III-2 show the location of these facilities with numbers that correspond to the index. Information for the facility spill history was extracted for the following set of latitudes and longitudes:

| Latitude | Longitude | Date |
|---|---|---|
| 33-30.0 N 33-50.0 N | 118-00.0 W 118-15.0 W | Jan 88-Apr 91 |
| 33-30.0 N 34-05.0 N | 118-15.0 W 119-15.0 W | Jan 88-Apr 91 |

The first "square" covers Huntington Beach to and including Long Beach Harbor. The second "square" covers the Port of Los Angeles to just North of Port Hueneme. An analysis of this data produced the following information:

Huntington Beach to Long Beach Harbor

| Amount | Percent of Total Spills |
|---|---|
| 1-5 gallons | 70% |
| 6-100 | 28% |
| 100 and over | 2% |

Total spills = 68

of these 30 were pipeline related

Port of Los Angeles to Port Hueneme

| Amount | Percent of Total Spills |
|---|---|
| 1-5 gallons | 58% |
| 6-100 | 38% |
| 100 and over | 4% |

Total spills = 52

of these 14 were pipeline related

Within Orange County there are four offshore platforms in the South Channel entrance to the Ports of Long Beach and Los Angeles. The MMS record of spills related to the operation of these facilities (1988-1991) has 21 reported spills listed. Of these 86% were 5 gallons or less. The remaining 14% were all less than 100 gallons.

## 9430 Risk Assessment

### 9430.1 Northern Sector

#### 9430.11.1 Spill Activity 1988-1994: A Statistical Analysis

For this report, USCG pollution reports (POLREPS) were analyzed for the South-Central coast, including Ventura, Santa Barbara, and San Luis Obispo Counties. Data from San Luis Obispo County was limited to vessel spills, and excluded recent estimates from the Guadalupe spill period of 1953-1994, which introduces a significant statistical bias to the study. A data pool of 362 POLREPS was analyzed for the period 1987 through early 1994, excluding Ventura and Santa Barbara County data for year 1991 (these records were not available at the time of data entry).

Data was entered using the following variables: date, location (latitude and longitude), product (crude oil, diesel oil, hydrocarbon residue, hydraulic oil, waste oil, lube oil), source (platform, vessel, shore facility) and quantity (gallons), then analyzed using a Statview program. For San Luis Obispo County, where source data did not indicate product, data was entered as "product: hydrocarbon residue"--the bulk of this consisted of petroleum products.

Frequency Distribution by Product: By far, the most frequent product reported in navigable waters was crude and diesel oil. Taken together, these two products comprise almost three-quarters of all reported spills (see pie chart for product--Figure 1). They are followed by hydraulic fluid (15 percent), waste oil (8 percent), lube oil (5 percent), and garbage.

Frequency Distribution by Source: Offshore oil platforms were the source of spills in 55 percent of the POLREPS cited (see Figure 2); however, they were one of the minor contributors in terms of actual quantity spilled (see Figures 3 and 4). Vessels comprised 40 percent of all POLREP sources, followed by shore facilities at 5 percent.

Quantity Distribution by Product and Source: Spills from reporting sources tended to be small, punctuated by occasional large spills (e.g. McGrath State Beach). This precludes statistically lumping all spills together by product, and underscores the need to qualify data by source.

The average **oil** spill size varied between 0.45 gallons (vessels) to 2.8 gallons (platforms) to 1,387 gallons (shore facilities). When considering **diesel fuel**--generally found on or around vessels--these proportions altered. Platforms and shore facilities spilled an average of 1.7 and 2 gallons respectively; however, vessels on average spilled 72.8 gallons of diesel fuel (std. dev. = 179.9).

#### 9430.11.2 Significant Findings in the Data

Even excluding tremendous quantities of diluent reportedly spilled at Unocal's Guadalupe facility, shore facilities by far have contributed the largest quantities of petroleum to South-central Coast waters between 1987 and 1994 (see Figure 3). Depending upon which reports are included, the total quantity of product spilled from shore facilities varies from one to three orders of magnitude above all other sources combined.

#### 9430.11.3 Environmental Concerns in Light of Data Analysis

Although scenario planning for spill activity did not comprise a major part of this historical summary, biologists at the Santa Barbara Museum of Natural History and other local biologists involved in conducting biological assays were queried. When asked to identify the region's most biologically sensitive areas, most opinions centered upon the Channel Islands and Point Conception promontory. The most often identified "epicenter" for biological species breeding in the area was San Miguel Island, most especially the Point Bennett breeding grounds on the southwest tip of the island. This island coastal area serves as a breeding ground for numerous fowl and several species of marine mammals.

### 9430.2 Southern Sector

#### 9430.21.1 Introduction

The purpose of this hazard analysis is to objectively discuss potential petroleum spill hazards in Los Angeles and Orange Counties. This was accomplished by reviewing the history of oil spills and the transportation, handling, and storage of petroleum. This analysis is only applicable for spills that occur or have the potential to occur in U.S. navigable waters in this COTP zone as defined in Annex A, Appendix IV. This applies to vessels, onshore and offshore facilities. The data for this analysis came from a combination of public and private sector information and computer database extract. The compilation of spill data covered the period from 1988 to the present, with the exception of the larger historical spills as discussed below. From the tabulation and study of this information came the basis and rationale for the scenarios discussed in Annex I.

#### 9430.21.2 Transportation

Approximately one-third of the total cargo moving through the harbor area (over land) is transported by truck. A tank truck accident within or near the harbor will probably not present a threat to the navigable waters unless the product spills into a storm drain, a canal, or the harbor itself. Of the coastal spills reported in 1992 to the Marine Safety Office (COTP) Los Angeles-Long Beach, 4% were caused by highway tank truck accidents in Los Angeles County. Orange County reported no tank truck spills in 1992.

Fifteen percent of the total petroleum within the port is transported by rail, and over half through pipelines. There is no data available for accidents by rail. Offshore and nearshore pipelines, however, were analyzed from two sources: Minerals Management Service's (MMS) Oil Spill Report for the Pacific OCS Region (review was done for 1988 through 1991); and the non-vessel spills print out from the Coast Guard database (Marine Safety Information System).

Based upon the review of spill data, vessel traffic has historically presented the largest and the most frequent source of oil discharges to the marine environment within Los Angeles and Orange counties. For a detailed description of highway and railway oil transportation within the port see NOAA's Oil and Hazardous Substances Planning and Response Considerations.

### 9430.21.3 References

The information collected for this analysis was derived from three sources: Marine Exchange reporting on the frequency of tanker traffic into and out of the Ports of Los Angeles and Long Beach, Port of Long Beach and Port of Los Angeles records of the amount of petroleum handled within the port, and actual spill history. The spill history, as examined from the Coast Guard computer database (MSIS) includes all spills reported (vessel and non-vessel) to this Marine Safety Office within the navigable waterways of Los Angeles and Orange Counties. Oil platform incidents, although not as frequent, can be just as damaging and harmful to the environment as tanker spills and data specific to platforms was also reviewed for this report (MMS Oil Spill Report).

### 9430.21.4 Conclusions

Although the all-inclusive dates of 1988 to 1992 were entered into MSIS, spill history was listed in tabular form only up to the middle of 1991. To bring this analysis up to the present, a review of all spills reported to this office (there was no distinguishing between vessel and non-vessel) was conducted for 01 January - 15 November 1992. The goal of this analysis was to determine the "average" size of petroleum spills within Los Angeles and Orange Counties. Approximately 63% of all the spills recorded since 1988 are 5 gallons and under. Taking into account all spills from 1-100 gallons, approximately 95% of spills reported to this COTP can be classified as "minor" according to the National Contingency Plan (NCP, 40 CFR 300) for coastal waters. For 1992 the average sized spill was calculated to be 20 gallons. To obtain this figure all reported spill amounts less than 500 gallons were averaged.

Considering the amount of vessel traffic into and out of the Ports of Los Angeles and Long Beach, the record of medium and major coastal spill incidents is small. Probably the most memorable spill to occur in the harbor was due to the explosion of the tanker vessel SANSINEA on 17 December 1976. The amount of oil spilled as a result of this accident was 30,000 barrels (1,260,000 gallons) of bunker C. The explosion resulted in the loss of the SANSINEA's entire cargo. In addition, the force of the explosion propelled the main deck of the vessel into the air and onto a 36-inch cargo line on top of the inshore isolation valve. The oil from this pipeline not only spilled into the harbor but also fueled the fire until it was discovered and capped four days later. The cause of this explosion resulted in the installation of Inert Gas Systems (IGS) on tank vessels to prevent the build-up of flammable vapors when offloading and on loading petroleum products. More recently, a medium sized discharge occurred from a foreign freight vessel moored in LA Harbor, the SAMMI SUPERSTARS. The cause of this spill was overflow of a tank during bunkering operations. The amount discharged was approximately 308 barrels of number 6 fuel oil. In Orange County, the American Trader incident in February of 1990 constituted a major spill in excess of 4000 barrels.

## 9440 Planning Assumptions - Background Information

Refer to Sections 9410 and 9420 of this Plan

## 9450 Planning Scenarios

### 9450.1 Northern Sector

#### 9450.11.1 Introduction

As required by OPA-90, a most probable discharge, a maximum most probable discharge, and a worst-case discharge are present for both the Northern and Southern Sectors. Scenario development and scenario driven shortfall analysis will be conducted by the Area Committees as necessary.

#### 9450.11.2 Worst Case Discharge

The Tank Vessel M. RONDEAU southbound enroute Long Beach in the SB channel is hit by a westbound Container Vessel SHANGHAI GLORY damaging 7 tanks onboard the RONDEAU. The RONDEAU is abandoned 8 hours later just as it breaks in two, the stern quickly sinks and the forward cargo block remains afloat leaking crude, all cargo is lost or spilled. The RONDEAU is carrying approximately 210,000 barrels of Monterey Crude.

The incident Occurs on February 20 at 1600. The winds blow at 20 kts from the SE on Feb 20, the first day of the oil spill. On Feb 21, they shift to the west and diminished slightly to eighteen knots, as the front passed through the area. The winds continued to shift to the NW over four hours and increased to 20 knots for eight hours. The wind diminished to 12 knots from the north as high pressure moved through the area the next day (22 Feb) as a result of the stalling of the high over the western desert, ENE Santa Anna winds began blowing down across the Ventura flood plain bringing 40 knot winds to the eastern Santa Barbara Channel for 24 hours. The Santa Ana winds diminished on 23 Feb and a clear weather pattern dominated the area for the next 4 days.

Affected/potentially affected areas throughout the course of this scenario include:

1) Mugu Lagoon, Pt. Mugu, Pt. Dume;

2) Santa Clarita River;

3) The Channel Islands (Santa Cruz and Anacapa);

4) Channel Islands Harbor and Mandalay Bay;

5) Ventura Harbor;

6) Port Hueneme Harbor;

7) Ventura County beaches/Malibu beaches in the vicinity of Pt. Dume, and;

8) Santa Catalina Island.

The required response action elements are presented in chronological sequence. These include initial actions, spill response organization, containment, countermeasures and cleanup strategies, resource requirements, available resources and sources of procurement, time necessary for cleanup, disposal options and procedures, and criteria for terminating the response activity. The following response strategy for this scenario and the estimated times are for planning purposes only and do not reflect performance standards.

1) 0-2 Hours:

CG receives notification from the T/V RONDEAU via CH16 at 1600, 20 Feb. Vessel reports its location and condition as per above scenario, states their intentions, and establishes comms schedule.

CG initiates Search and Rescue (SAR) and firefighting response per District Eleven SAR Plan and SECTOR LA/LB Firefighting Contingency Plan. CG helicopter launched from LAX. Search and rescue concerns are at all times priority and exclusive of all other concerns. For the purposes of this response strategy, search and rescue efforts are details are directed by the Group and not addressed in this plan.

CG initiates external and internal notifications including CA Office of Emergency Services (OES), CA Dept of Fish and Game (F&G) Oil Spill Prevention Response (OSPR), and CG District Eleven (D11). CG/OSPR initiates internal recalls/mobilizes Unified Command System (UCS) and Incident Command System (ICS). D11 activates the Regional Response Team (RRT). Notify Scientific Support Coordinator (SSC) and mobilize SSC network. All response entities make notifications as per internal directives.

CG SECTOR LA/LB (predesignated Federal on Scene Coordinator (FOSC)) initiates pollution and casualty investigation efforts. Initial investigators enroute via designated SAR platform, i.e. 82 footer, 180 footer, 210 footer, or 378 footer. ETA for CG/OSPR representatives, 2 hours. OSPR investigators contacted and rendezvous established.

Confirmed vessel is American registry and operation. Responsible Party (RP) and vessel-qualified individual are identified for the cleanup. RP initiates mobilization and cleanup actions as per their contingency plan. FOSC requests to access Oil Spill Liability Fund in the amount of $2 million. Approval granted, fund ceiling to be continually reevaluated. RP activates via Clean Seas preventative boom plans for Mugu Lagoon, Santa Clarita River, Channel Islands Harbor, Ventura Harbor and Port Hueneme Harbor. Regional open water recovery assets contracted and dispatched including Clean Coastal Waters, Marine Spill Response Corporation (MSRC), Clean Seas, and Navy SUPSALV. Weather limits vessels, which can safely operate offshore. Clean Seas alerts dispersant aircraft/helo dispersant system. Estimated on-scene arrival times for Oil Spill Recovery Vessels (OSRV):

Clean Waters I +6 hours

Recovery I and II +6 hours

Mr. Clean +4 hours

Mr. Clean II +12 hours

Mr. Clean III +6 hours

California Responder +2 hours

Pacific Responder +18 hours

MSRC OSRV fm Astoria +72 hours

11 Navy SUPSALV Marco V skimmers +48 hours

Three VOSS vessels fm LA-LB +10 hours

Clean Seas/MSRC barges +8 hours

Remote Oil Spill Sensor System (ROSSS) called out. Area Contingency Plan (ACP) Airops plan activated. Fishermen's Oil Response Team (FORT) notified and 10 vessels called out. Thirty FORT vessels are placed on standby.

ACP Comms plan activated.

Initial press release issued. District Eleven public affairs staff establishes press operations. National Strike Force Coordination Center (NSFCC) and Pacific Area Strike Team (PIAT) alerted, assets requested including PST COMCEN, OWOCR'S, salvage pumps, storage equipment. CG Public Information/Affairs Team (PIAT) dispatched.

RP/CG notifies facilities with water intakes in the area.

RP notifies bird rescue/wildlife coordinators.

2) 02-04 hours:

Evaluate ships' diagrams and intentions. Assess vessels current status and identify cargo and condition. Salvage issues are being actively addressed. Tugs dispatched to assist the vessels as necessary.

MR Clean I and California Responder o/s.
Address health and safety issues for response personnel and community-at-large. Site characterization team on scene developing site safety plan and identifying health and safety issues. Site entry plan completed.

RP establishes a command post at MSRC Port Hueneme/CG sets up initial command post at CG Station Channel Islands. Identified MSRC yard as primary staging area.

Receive initial information and situation report from CG platform and aircraft. Request CG Aireye support.

Receive SSC initial oil spill trajectory. Present indications are that Ventura/Channel Islands Harbor and beaches are at risk.

Start active planning and prioritizing of resources at risk. Preventative booming plan/staging ongoing for priority areas (Mugu Lagoon, Santa Clarita River, Channel Islands Harbor, Mandalay Bay, Ventura Harbor and Port Hueneme Harbor).

Establish safety zones, Broadcast Notice to Mariners, airspace safety separation scheme. Address applicable waterways management issues.

RP mobilizes 300 shoreline workers for first light operations.

Clean Seas calls out additional barges from LA-LB, eta +12 hours.

3) 04-06 hours:

RP Activates Hazardous Waste Operations and Emergency Response (HAZWOPER) training program at MSRC staging site.

Components of UCS forming. FOSC declares Spill of National Significance (SONS).

ROSSS airborne and transmitting images.

Health and safety parameters established.
Response resources arriving on-scene, conducting limited operations due to weather. Open water containment efforts being executed as weather allows. Clean Seas/MSRC has deployed 10,000 feet of boom offshore.

Alternate Response Technologies (ART) options considered (dispersants and in-situ burning specifically addressed).

4) 06-10 hours:

MR Clean III, Clean Waters I and Recovery I & II o/s.

Open water de-rated skimming capacity approximately 60,000 barrels a day.

Six Clean Seas boom boats (20-45 feet in length) are o/s. Activate additional 30 FORT vessels. Dispersant aircraft o/d at Oxnard airport.
Clean Seas and MSRC barges o/s (total storage capacity @ approximately 50,000 barrels).
NOAA trajectories arrive and data evaluated. Trajectories confirm initial conclusions and beach impact estimated for P.M. 21 Feb in vicinity of Mandalay beach. Maximize open water recovery efforts/equipment. Mobilize Pacific Coast open-water recovery assets; ETA:

MSRC Astoria +42 hours

Clean Bay +24 hours

Clean Sound +66 hours

Components of UCS continue to connect to SONS organization.
Operations decisions made based on current info. Response priorities established/detailed and mobilized for shoreline, i.e. shoreline workers. Prioritize staging operations. Recognizing the sensitivity of Channel Islands National Park, decision made not to use dispersants except on the western leading edge of the spill to mitigate progress of spill in the direction of the Channel Islands.

Procure area shoreside cleanup assets (equipment/personnel). Make initial contacts with shoreline cleanup contractors. Establish active liaison with command post.

Notify Navy assets in Port Hueneme and Air Force assets at Vandenberg AFB, and establish liaisons for air traffic separation scheme and air safety plans.

Activate volunteer portion of Area Contingency Plan.
Mobilize wildlife recovery equipment.
Additional CG assets arriving in area/on-scene, e.g. Pacific Strike Team (PST), Cutters, additional aircraft, District Response Advisory Team (DRAT), etc.

5) 10-14 hours:

MR Clean II on-scene (at hour 14). Plans for beach pre-cleaning and staging are ongoing. Interagency Shoreline Cleanup and Assessment Teams (SCATS) established for first light evaluations. Three Vessels of Opportunity Skimming System (VOSS) arrive o/s.

Elements of UCS are starting to address numerous details.

Decisions made on staging equipment, recovery plan, and waste stream plan.

6) 14-18 hours:

Pacific Responder o/s (at hour 18). The additional 30 FORT vessels o/s. Open water recovery remains limited due to weather.

Public information staff coordinates first Press Conference. They begin to issue periodic, updated press releases.

Regular overflight schedule established.
Establish daily UCS meetings. Morning meeting conducted. Local government involvement being coordinated by OSPR. Joint Command Post to be established at Civic Center.
First light overflight information and observations being compared to trajectory and ROSSS data. Conclusions support beach impact by late afternoon in the vicinity of Mandalay beach. Established Field Command Post at Mandalay beach. 300 workers arrive at Mandalay beach for precleaning and staging. 200 additional workers placed on standby. Information suggests that the Channel Islands may be threatened, dispersants issues are addressed. For the purposes of this response strategy the decision is made to apply dispersants to the leading western edge of the spill to decrease potential impact on the Channel Islands.

Managing incoming resources (personnel/equipment) at primary staging area. Day/work boat cleaning and other vessel support and logistics being coordinated at Port Hueneme.

All protective booming previously identified is now in place.

All elements of UCS are continuing to address numerous issues.
Air Operations plan on-line prioritizing overflight schedule/needs.
Natural Resource Damage Assessment (NRDA) personnel arriving, forming teams, and developing sampling plan/coordination. Network for marine mammal rehab notified.
Initial recovery teams identified for bird recovery/rehabilitation.

Onshore storage, transfer, and disposal facilities identified. Tank ship destination a priority site. Additional barge from LA-LB arrives (approximately 80,000 barrel storage capacity now o/s).

Planning section working to identify National resources/equipment.

Assessing real time info to anticipate next actions.
Joint investigative teams established.
Finance section on-line and operating. National Pollution Funds Center personnel arrive.
Mobile communications suites arriving at primary staging area for subsequent redeployment (e.g. MSRC, OES, PST, CAMSPAC SF, etc.)

NOTE: This response strategy focuses on the events leading up to the full establishment of the UCS organization. From the point of UCS organization coming on-line, it deals principally with the operation issues and does not specifically address the details of each of the support functions/components. These are further described in the appropriate annexes to this plan.

7) 18-30 hours (Day 2):

Weather continues to preclude full capacity open-water recovery.

ROSSS over flights continuing.

All UCS support activities continue.
Oil Spill impacts Mandalay beach. Active shoreline cleanup begins. Mainland near shore/shoreline cleanup plan is established. Approximately 5 - 10 miles of beach are impacted. Beach management issues addressed with local authorities.

Establish Channel Islands task force (specifically include National Park Service), make recommendations to UCS (e.g., diversion booming, beach surveys, over flights, [plans: NPS, NOAA-SRD] ETC.) Major field command post established on Anacapa Island. Contractors put on notice to have 500 shoreline workers available to support Channel Island ops.

Made decisions on disposal of recovered oil (i.e., recycle, store, etc).

Alert an additional 40 FORT vessels.

**8) Day 3:**
Spill impacts Anacapa and Santa Cruz Islands. Implementing recommendations of Channel Islands task force, including concentrating open water recovery efforts on western edge of spill. 50,000 - 60,000 feet of open water boom redeployed and configured to minimize impact on Channel Islands. An additional 200 cleanup workers are deployed to Mandalay beach. Small boats and smaller skimmers positioned in key locations around Channel Islands in near shore zones.

Weather abates and open water efficiencies improve. On scene derated skimming capacity at approximately 90,000 barrels per day. At the end of day three, it is estimated that 35% of the discharged 210,000 barrels has evaporated/dissipated. A factor of 2 is used for planning purposes to calculate mouse/emulsion for recovery efforts. The result is an estimated 280,000 barrels of oil/water emulsion to recover. In keeping with planning parameters, 50% (approximately 140,000 barrels) of this is estimated to impact shoreline and 50% (approximately 140,000 barrels) to be recovered via open water operations. With adverse weather having limited operations into day 3, approximately 50,000 barrels have been recovered in open water operations at end of day three.

Over flights continue.
Daily morning and evening command briefs scheduled/on-line.

SCATS actively evaluating and recommending shoreline cleanup strategies for Anacapa and Santa Cruz Islands.

Conducting beach assessments for all impacted and potentially impacted beach areas.
Navy SUPSALV Skimmers arrive.

**9) Day 4:**
500 shoreline workers deployed to Anacapa and Santa Cruz Islands under the direction of the On-Site Command Center on Anacapa.
40 FORT vessels deployed to Anacapa Command Center.
MSRC OSRV from Astoria arrives, this adds 10,000 bbls per day capability for a total of approximately 100,000 bbls per day for the task force.

Over flights continue.
Day four estimate of recovered oil via open water cleanup ops is approximately 100,000 bbls.

**10) Day 5-8:**
SCATS continue to evaluate and recommend shoreline cleanup strategies for Anacapa Island, Santa Cruz Island, and Mandalay beach areas.

It is estimated from trajectory and wind conditions that mainland beaches will, again, be impacted by the oil spill. This time from Pt. Mugu to Pt. Dume. Catalina Island is also at risk of being impacted by the oil spill. Estimated to impact both locations on day 9. Pt. Mugu and Catalina Island task forces established.

Beach teams dispatched to beaches between Pt. Mugu and Pt. Dume and Catalina Island. SCAT efforts expanded to include these areas. Contractors notified to provide 500 shoreline workers for Pt. Mugu and 100 workers for Catalina Isl. Beach precleaning begins. Three field command posts are established: Pt. Mugu, Pt. Dume, and Catalina Island.

Anacapa Island and Santa Cruz Island cleanup is ongoing.
Beaches south of Pt. Dume identified as potentially at-risk.
Santa Monica Bay task force established.
Day eight estimate of recovered oil via open water cleanup ops is 130,000 bbls.

11) Day 9-10:

Oil impacts beaches between Pt. Mugu and Pt. Dume on day 9.

Active cleanup is initiated. 500 shoreline workers assigned.

Oil impacts beaches on Catalina Island on day 10. 100 shoreline workers assigned. Booming of harbor by FORT vessels accomplished.

Anacapa Island and Santa Cruz Island cleanups are ongoing. Daily assessments continue. Morning and afternoon briefings continue. Full SONS on-line.

Demobilize task forces as areas are cleaned.

12) Day ll-19:

Open water cleanup continues as necessary.

Beach cleanup ongoing.

SCATs provide frequent assessments and make recommendations to UCS for 'cleanup complete' segment by segment. FOSC authorized termination of active cleanup efforts based on SCAT recommendations and all other available info. NRDA teams continue ongoing assessments.

13) Day 20:

Open water recovery operations completed/secured. Approximately 140,000 barrels recovered via open water operations. SCATs continue efforts in remaining impacted areas. Continued shoreline cleanup as necessary.

Cleanup of vessel and response equipment an important issue. Plans developed to facilitate effective equipment cleaning during demobilization phase of open water recovery efforts.

14) Day 21 – Demobilization:

SCATs provide frequent assessments and make recommendations to UCS for "cleanup complete' segment by segment. FOSC authorizes termination of active cleanup efforts based on SCAT recommendations and all other available information. NRDA teams continue ongoing assessments.

**9450.11.3 Major Resource Requirements**
Santa Catalina Island - 10,000 feet of boom; 100 workers.

Pt. Mugu to Pt. Dume beaches - 10,000 feet of boom; 500 workers.

Santa Rosa and Anacapa Isl - 10,000 feet of boom; 100 workers.

Mandalay Bay - 9,000 feet of boom; 500 workers.

Open water - 60,000 feet of boom.

Thirteen major OSRV'S, eleven Navy SUPSALV vessels, and at least three tugs and barges to transfer to.

**9450.11.4 Shortfalls**

1. No local availability of fire boom. Substantial expense to maintain local stockpile.

2. Quantity and stockpiled dispersant may not be best dispersant for a given product. COREXIT 9527 is currently stockpiled. Availability of other dispersants unknown.

3. Availability of trained local volunteers and workers will be time-dependent. Initially, the number of trained volunteers and workers will be finite. As the spill progresses through time, OSHA training classes can be continuously conducted for arriving, untrained personnel. This scenario has identified a need for 1,200 shoreline workers.

4. Availability of small workboats and trained operators will limit efforts in the many inaccessible portions affected by this scenario (i.e. Mandalay Beach, Anacapa, Santa Cruz, Santa Catalina, and Pt. Mugu to Pt. Dume.)

5. Potential conflicts between investigative actions and cleanup efforts. For example, any legally imposed requirement associated with NRDA or recovered oil amount and effects may hamper/limit-cleaning operations.

6. Uncertainty as to availability of cascadable equipment due to regulations, permits, and operating limitations of industry in other areas from which the OSRV's are drawn. This scenario presumed the availability of all cascadable 13 major OSRV'S.

7. Offshore decontamination of vessels and equipment may be a regulatory issue whereby effective means of removing oil from vessels may be hampered. Vessels required to come into port for cleaning reduce time in active skimming ops, thus reducing further the derated capacity of the skimmers.

8. Deployment of public equipment, i.e. NSF OWOCRs (who/how) needs to be addressed. RP's not required to plan for this in current contingency plans.

**9450.11.5 Maximum Most Probable Discharge**

An inbound Japanese car carrier PACIFIC TERROR is nearing the NW end of the Santa Barbara Channel Traffic Separation Scheme with a cargo of automobiles. A Scandinavian flag freight ship BENA is outbound from Santa Barbara Channel Traffic Separation Scheme. The two vessels collide and the BENA is damaged in the #4 and #5 cargo holds, opening them to the sea. Two of her fuel tanks are compromised as well. The PACIFIC TERROR sustains a gash in its bow above the waterline. The two vessels are locked together until the PACIFIC TERROR backs down to separate them. No injuries are sustained. A total of 8,000 barrels of Bunker C, #6 fuel oil, are discharged into the sea. The BENA eventually sinks (towing efforts prove fruitless) 10 miles WSW of Pt. Conception.

The incident occurs on February 20 at 1200. The winds blow at 20 kts from the NW when the spill begins. Two hours later the winds swing to northerly winds at 12 knots for the next six hours. Then, for the remainder of this scenario the winds are NW at 15 knots.

Affected/potentially affected areas throughout the course of this scenario include the Channel Islands (San Miguel, Santa Rosa).

The required response action elements are presented in chronological sequence. These include initial actions, spill response organization, containment, countermeasures and cleanup strategies, resource requirements, available resources and sources of procurement, time necessary for cleanup, disposal options and procedures, and criteria for terminating the response activity. The following response strategy for this scenario and the estimated times are for planning purposes only and do not reflect performance standards.

1) 0-2 Hours:

CG receives notification from the T/V BENA via CH16 at 1200, 20 Feb. Vessel reports its location and condition as per above scenario, states their intentions, and establishes comms schedule.

CG initiates Search and Rescue (SAR) response per District Eleven SAR Plan. CG helicopter launched from LAX. Search and rescue concerns are at all times priority and exclusive of all other concerns. For the purposes of this response strategy, search and rescue efforts are directed by the Group and not addressed in this plan.

CG initiates external and internal notifications including CA Office of Emergency Services (OES), CA Dept of Fish and Game (F&G) Oil Spill Prevention Response (OSPR), and CG District Eleven (D11). CG/OSPR initiates internal recalls/mobilizes Unified Command System (UCS) and Incident Command System (ICS). D11 activates the Rapid Response Team (RRT). Notify Scientific Support Coordinator (SSC) and mobilize SSC network. All response entities make notifications as per internal directives.

CG SECTOR LA/LB (predesignated Federal on Scene Coordinator (FOSC)) initiates pollution and casualty investigation efforts. Initial investigators enroute via designated SAR platform, i.e. 82 footer, 180 footer, 210 footer, or 378 footer. ETA for CG/OSPR representatives, 3 hours. OSPR investigators contacted and rendezvous established.

Confirmed vessel is foreign registry and operation. Responsible Party (RP) and vessel-qualified individual are identified for the cleanup. FOSC notifies RP of federal assumption. FOSC requests to access Oil Spill Liability Fund in the amount of $5 million. Approval granted, fund ceiling to be continually reevaluated. Regional open water recovery assets contracted and dispatched including Clean Coastal Waters, Marine Spill Response Corporation (MSRC), Clean Seas, and Navy SUPSALV. Weather limits vessels, which can safely operate offshore. Clean Seas alerts dispersant aircraft/helo dispersant system. Estimated on-scene arrival times for Oil Spill Recovery Vessels (OSRV):

Clean Waters I +18 hours

Recovery I and II +18 hours

MR Clean +6 hours

MR Clean II +4 hours

MR Clean III +11 hours

California Responder +8 hours

Pacific Responder +14 hours

11 Navy SUPSALV Marco V skimmers +48 hours

Three VOSS vessels fm LA-LB +18 hours

Clean Seas/MSRC barges +16 hours

Remote Oil Spill Sensor System (ROSSS) called out. Area Contingency Plan (ACP) Airops plan activated. CG coordinating helo operations. Fishermen's Oil Response Team (FORT) notified and 10 vessels called out. Ten additional FORT vessels are placed on standby.

ACP Comms plan activated.

Initial press release issued. District Eleven public affairs staff establishes press operations. National Strike Force Coordination Center (NSFCC) and Pacific Area Strike Team (PIAT) alerted, assets requested including PST COMCEN, OWOCR'S, salvage pumps, storage equipment. CG Public Information/Affairs Team (PIAT) dispatched.

OSPR notifies bird rescue/wildlife coordinators.

Dispersant aircraft placed on standby and moved to Santa Barbara. ETA +6 hours.

Evaluate ships' diagrams and intentions. Assess vessels current status and identify cargo and condition. Salvage issues are being actively addressed. Tugs dispatched to assist the vessels as necessary.

Address health and safety issues for response personnel and community-at-large. Site characterization team on scene developing site safety plan and identifying health and safety issues. Site entry plan completed.

CG sets up initial command post at CG Station Channel Islands.

Identified Port Hueneme as primary staging area.

Receive initial information and situation report from CG platform and aircraft.

Request CG Aireye support.

Receive SSC initial oil spill trajectory. Present indications are that San Miguel and Santa Rosa Islands are at risk in approximately 40 hours.

Start active planning and prioritizing of resources at risk. Establish Channel Islands Task Force to identify protective booming and precleaning measures; make recommendations.

Establish safety zones, Broadcast Notice to Mariners, airspace safety separation scheme. Address applicable waterways management issues.

Weather has abated. Full open water derated capacity skimming begins.

CG mobilizes 50 shoreline workers for first light operations.

3) 04-06 hours:

California Responder and Mr. Clean on scene.
RP Activates Hazardous Waste Operations and Emergency Response (HAZWOPER) training program at Port Hueneme staging site.

Components of UCS forming.

ROSSS airborne and transmitting images.

Health and safety parameters established.

Response resources arriving on-scene, conducting limited operations due to weather. Open water containment efforts being executed as weather allows.

Alternate Response Technologies (ART) options considered (dispersants and in-situ burning specifically addressed).

4) 06-10 hours:

Clean Seas/MSRC has deployed 10,000 feet of boom offshore.

Open water derated skimming capacity approximately 40,000 barrels a day. Six Clean Seas boom boats (20-45 feet in length) are o/s. Dispersant aircraft o/d at Santa Barbara airport.

NOAA trajectories arrive and data evaluated. Trajectories confirm initial conclusions and beach impact estimated for morning 22 Feb in vicinity of San Miguel/Pt. Bennett.

Components of UCS continue to connect to SONS organization.

Operations decisions made based on current info. Response priorities established/detailed and based upon information provided by Channel Island Task Force. Prioritize staging operations.

Procure area shore side cleanup assets (equipment/personnel). Make initial contacts with shoreline cleanup contractors. Establish active liaison with command post.

Notify Navy assets in Port Hueneme and Air Force assets at Vandenberg AFB, and establish liaisons for air traffic separation scheme and air safety plans.

Activate volunteer portion of-Area Contingency Plan.

Mobilize wildlife recovery equipment.

Additional CG assets arriving in area/on-scene, e.g. Pacific Strike Team (PST), Cutters, additional aircraft, District Response Advisory Team (DRAT), etc.

**5) 10-14 hours:**
Decision is made to apply dispersants to the leading edge of spill to prevent/reduce impact to Channel Islands. In situ burning determined to be impractical in current weather conditions.

Mr. Clean II on-scene (at hour 14). Plans for beach pre-cleaning and staging are ongoing. Interagency Shoreline Cleanup and Assessment Teams (SCATS) established for first light evaluations. Three Vessels of Opportunity Skimming System (VOSS) arrive o/s.

Clean Seas and MSRC barges o/s (total storage capacity @ approximately 50,000 barrels).

Elements of UCS are starting to address numerous details.

Decisions made on staging equipment, recovery plan, and waste stream plan.

6) 14-18 hours:

Final dispersant application plans in place for first light application.

Pacific Responder o/s. The additional 10 FORT vessels o/s. Open water recovery remains limited due to weather.

Regular overflight schedule established.

Managing incoming resources (personnel/equipment) at primary staging area. Day/work boat cleaning and other vessel support and logistics being coordinated at Port Hueneme.

All elements of UCS are continuing to address numerous issues.

Air Operations plan on-line prioritizing overflight schedule/needs.

Planning section working to identify national resources/equipment. Assessing real time info to anticipate next actions.

Joint investigative teams established.

Mobile communications suites arriving at primary staging area for subsequent redeployment (e.g. MSRC, OES, PST, etc.)

NOTE: This response strategy focuses on the events leading up to the full establishment of the UCS organization. From the point of UCS organization coming on-line, it deals principally with the operation issues and does not specifically address the details of each of the support functions/components. These are further described in the appropriate annexes to this plan.

**7) 18-30 hours (0600-1800 Day 2):**
Public information staff coordinates first Press Conference. They begin to issue periodic, updated press releases.

Establish daily UCS meetings. Morning meeting conducted. Local government involvement being coordinated by OSPR. Joint Command Post to be established at Station Channel Islands.

First light overflight information and observations being compared to trajectory and ROSSS data. Conclusions support beach impact by the morning of 22 Feb in the vicinity of San Miguel Island. 50 workers arrive at primary staging area for pre-cleaning and staging.

Natural Resource Damage Assessment (NRDA) personnel arriving, forming teams, and developing sampling plan/coordination. Network for marine mammal rehab notified. Initial recovery teams identified for bird recovery/rehabilitation.

Onshore facilities for disposal identified.

ROSSS over flights continuing.

Activate additional 10 FORT vessels.

All UCS support activities continue.

Clean Waters vessels (3) arrive o/s. Open water de-rated skimming capacity at approximately 80,000 bbls per day.

Made decisions on disposal of recovered oil (i.e., recycle, store, etc).

Application of dispersants begins.

8) Day 3:

Spill impacts San Miguel Island/Pt. Bennett. Implementing recommendations of Channel Islands task force, including concentrating open water recovery efforts on western edge of spill. 30,000 feet of open water boom deployed and configured to minimize impact on Channel Islands. Small boats and smaller skimmers positioned in key locations around Channel Islands in near shore zones.

At the end of day three, it is estimated that 10% of the discharged,8,000 barrels has evaporated/naturally dissipated. Emulsification factor is low. The result is an estimated 7,200 barrels of oil to recover. Approximately 5,000 barrels have been recovered in open water operations at end of day three. It is estimated that dispersant application has effected and additional 700 barrels, leaving approximately 1500 barrels yet to be recovered.

Over flights continue.

Trajectory estimates indicate impact to Santa Rosa Island likely on day 4. Initiate protective/deflective booming on the North side of Santa Rosa and South Point.

Daily morning and evening command briefs scheduled/on-line.

SCATS actively evaluating and recommending shoreline cleanup strategies for San Miguel and Santa Rosa Islands. Conducting beach assessments for all impacted and potentially impacted beach areas.

Navy SUPSALV Skimmers arrive.

Continuing to apply dispersants to areas 3 miles off island coasts.

9) Day 4:

SCATS continue to evaluate and recommend shoreline cleanup strategies for San Miguel and Santa Rosa Islands.

Over flights continue.

Moderate sheening and small patches impacting North and South sides of Santa Rosa, and Western San Miguel.

Open water efforts continuing, but chasing only sheens.

10) Day 5:

Over flights indicate only light sheening remains in open water areas.

Securing Clean Seas vessels, Pacific Responder, California Responder, Mr. Clean III, command center at Port Hueneme.

Task force continues to assess and recommend Channel Island clean up actions for ongoing operations.

Morning and afternoon briefings continue.

Cleanup of vessel and response equipment an important issue. Plans developed to facilitate effective equipment cleaning during demobilization phase of open water recovery efforts.

11) Day 6:

SCATs provide frequent assessments and make recommendations to UCS for "cleanup complete" segment by segment. FOSC authorized termination of active cleanup efforts based on SCAT recommendations and all other available info.

Securing all open water assets.

NRDA demobilizing in Port Hueneme.
Demobilize task forces as areas are cleaned.

**9450.11.6 Major Resource Requirements**
Santa Miguel Island - 50 workers.

Open water - 30,000 feet of boom;

Nine major OSRV'S, eleven Navy SUPSALV vessels, and at least two tugs and barges to transfer to.

**9450.11.7 Shortfalls**
1. Quantity and stockpiled dispersant may not be best dispersant for a given product. COREXIT 9527 is currently stockpiled. Availability of other dispersants unknown.

2. Availability of trained local volunteers and workers will be time-dependent. Initially, the number of trained volunteers and workers will be finite. As the spill progresses through time, OSHA training classes can be continuously conducted for arriving, untrained personnel. This scenario has identified a need for 50 shoreline workers.

3. Availability of small workboats and trained operators will limit efforts in the many inaccessible portions affected by this scenario (i.e. San Miguel and Santa Rosa Islands.)

4. Potential conflicts between investigative actions and cleanup efforts. For example, any legally imposed requirement associated with NRDA or recovered oil amount and effects may hamper/limit-cleaning operations.

5. Uncertainty as to availability of cascadable equipment due to regulations, permits, and operating limitations of industry in other areas from which the OSRV's are drawn. This scenario presumed the availability of all cascadable 9 major OSRV'S.

6. Offshore decontamination of vessels and equipment may be a regulatory issue whereby effective means of removing oil from vessels may be hampered. Vessels required to come into port for cleaning reduce time in active skimming ops, thus reducing further the de-rated capacity of the skimmers.

7. Deployment of public equipment, i e. NSF OWOCRs (who/how) needs to be addressed. RP's not required to plan for this in current contingency plans.

**9450.11.8 Most Probable Discharge**
The 45-foot Fishing vessel (F/V) "Codface" is in the process of docking at the fish unloading dock in Ventura Harbor Village. During this time a deck hand on board the vessel inadvertently turns on the bilge pump, which in turn discharges approximately 3 gallons of diesel fuel and water mixture into the water. The Master of the vessel notices the sheen and continues to dock thee vessel and prepare for unload as if nothing happened.

The incident occurs on May 01 at 0700. The winds are out of the NW at 10-12 kts with daytime temperatures of 80 degrees for the entire model spill.

Affected/potentially affected areas throughout the course of this scenario include Ventura Village Harbor, slip 26-29.

The required response action elements are presented in chronological sequence. These include initial actions, spill response organization, containment and cleanup strategies, resource requirement, time necessary for cleanup, and criteria for termination the event. The following response strategy for this scenario and the estimated times are for planning purposes only and do not reflect performance standards.

1) 0.5-01 Hours:

CG MSD Santa Barbara receives notification from the Ventura Harbor Patrol via landline at 0800, 01 May. The Harbor Patrol reports that upon receiving a report from the dock master at Ventura Village Marina, an investigation revealed about a 1-gallon diesel spill with sheen spread out between slips 26-29. And only one F/V called the Codface in the area at that time. The Harbor Patrol was detaining the vessel until arrival of the CG.

CG initiated external and internal notifications including CA Office of Emergency Services (OES), CA Dept of Fish and Game (F&G), and Ventura County Water Quality.

CG MSD Santa Barbara (pre-designated Federal on Scene Coordinator (FOSC)) initiates pollution investigation efforts. Duty Pollution Investigators dispatched to scene to initiate pollution investigation and confirm cleanup actions needed. ETA for CG representatives is 15 minutes.

CG investigators arrive on scene verify information set forth in scenario but are unable to ' identify path to the F/V Codface as most of the sheen has dispersed due to tidal action and evaporation. The master of the vessel Mr. Wong Lee reluctantly accepts responsibility for the incident, but claims that the turning on of the bilge pump was an accident. Mr. Wong Lee, with the assistance of his crew, placed sorbent pads into the water to absorb the remaining sheen and hired "Small Spill Inc." to properly remove and dispose of the pads.
Resources and estimated response time of hired cleanup and salvage contractors is as follows:

Ventura Harbor Patrol +1.0 hrs

1 small truck & trailer(Small Job Waste Co.) +2.5 hrs

2) 1-2 hours:

SECTOR LA/LB receives report from CG Investigators and F&G on scene that evaporation and tidal action has all but removed the diesel fuel from the water with the exception of a few small pockets of sheen trapped within the harbor slips. F&G confirms a low threat risk to wildlife.

CG/F&G, with the assistance of local authorities, verifies that there are no water intakes in the area.

Further investigation reveals that the cause of the spill-was due to a deck hand on the vessel turning on the bilge pump, determined by later admission to CG.

Health and safety issues of site safety plan considered for waste removal personnel.

Waste removal zone identified, no safety zone necessary, no Broadcast Notice to Mariners necessary.

3) 2-3 hours.

Response resources arriving on-scene; Small Spill Inc. truck and trailer with related cleanup gear.

Cleanup staging operations activated. Planning strategy by RP based on input from CG, F&G, and Contractors for waste removal adjacent to slip 26-29.

Sorbent recovery operations commence. Removal of sorbent pads by punt, bagged and hauled up the pier to Small Spills Inc. container

4) 3-4 hours:

Evaluation of cleanup and meeting of CG, RP, F&G, and cleanup contractors conducted on scene. The meeting has determined that only very small amounts of unrecoverable sheen remain in the water. The CG and F&G instruct the crew of the M/V "Codface" about the violations of state and federal laws when oil is discharged into navigable waters. The vessel would be allowed to be continue commercial activities pending continued investigation and possible civil penalties.

Final determination of meeting members after thorough waterside inspection is that all cleanup efforts to be secured.

**9450.11.9 Potential Shortfalls**

General lack of understanding of violation to discharge oil into the navigable waters by foreign commercial boat operators.

Limited local CG response resources available for geographical responsibility.

Only recall available of local CG resources after normal working hours.

All aspects of cleanup operations should be conducted and concluded by all parties involved in a response including federal, state, and local agencies, responsible party, and the contractor.

**9450.11.10 Platform Discharge**

An oil platform in the Santa Barbara area reports a pipeline rupture offshore associated with its drilling activities. Approximately 2200 barrels of Monterey crude were released.

The incident occurs on February 20 at 1600. Storm conditions exist with the winds blowing at 25 kts from the SW and seas/swells are 8-10 feet, on Feb 20, the first day of the oil spill. Eighteen hours later ESE winds at 15-20 knots prevail. It is noted that current considerations are significant in this area for purposes of strategy information.

Affected/potentially affected areas throughout the course of this scenario include:

1) Mugu Lagoon, Pt. Mugu, Pt. Dume;

2) Santa Clarita River;

3) The Channel Islands (Santa Cruz and Anacapa);

4) Channel Islands Harbor and Mandalay Bay;

5) Ventura Harbor;

6) Port Hueneme Harbor;

7) Ventura County beaches/Malibu beaches in the vicinity of Pt. Dume, and;

8) Santa Catalina Island.

The required response action elements are presented in chronological sequence. These-include initial actions, spill response organization, containment, countermeasures and cleanup strategies, resource requirements, available resources and sources of procurement, time necessary for cleanup, disposal options and procedures, and criteria for terminating the response activity. The following response strategy for this scenario and the estimated times are for planning purposes only and do not reflect performance standards.

1) 0-2 Hours:

CG receives notification from the platform at 1600, 20 Feb.

Platform reports its condition as per above scenario, states their intentions, and establishes comms schedule.

CG initiates external and internal notifications including CA Office of Emergency Services (OES), CA Dept of Fish and Game (F&G) Oil Spill Prevention Response (OSPR), Minerals Management Service (MMS), and CG District Eleven (D11). CG/OSPR initiates internal recalls/mobilizes Unified Command System (UCS) and Incident Command System (ICS). D11 activates the Rapid Response Team (RRT). Notify Scientific Support Coordinator (SSC) and mobilize SSC network. All response entities make notifications as per internal directives.

CG SECTOR LA/LB (pre-designated Federal on Scene Coordinator (FOSC)) initiates pollution and casualty investigation efforts. Initial investigators enroute. ETA for CG/OSPR representatives, 2 hours via RP provided helo. CG water platform ETA +4 hours. OSPR investigators contacted and rendezvous established.

Responsible Party (RP) and qualified individual are identified for the cleanup. RP initiates mobilization and cleanup actions as per their contingency plan and makes additional required notifications. FOSC requests to access Oil Spill Liability Fund in the amount of $1 million. Approval granted, fund ceiling to be continually reevaluated. Regional open water recovery assets contracted and dispatched including Clean Coastal Waters, Marine Spill Response Corporation (MSRC), Clean Seas, and Navy SUPSALV. Weather limits vessels, which can safely operate offshore. Clean Seas alerts dispersant aircraft/helo dispersant system. Estimated on-scene arrival times for Oil Spill Recovery Vessels (OSRV):

Clean Waters I +18 hours

Recovery I and II +18 hours

MR Clean +6 hours

MR Clean II +4 hours

MR Clean III +14 hours

California Responder +8 hours

Pacific Responder +14 hours

11 Navy SUPSALV Marco V skimmers +48 hours

Three VOSS vessels fm LA-LB +18 hours

Clean Seas/MSRC barges +16 hours

Remote Oil Spill Sensor System (ROSSS) called out. Area Contingency Plan (ACP) Airops plan activated. Fishermen's Oil Response Team (FORT) notified and 10 vessels called out. Thirty FORT vessels are placed on standby. RP gets helo overflight. ACP Comms plan activated.

Initial press release issued. District Eleven public affairs staff establishes press operations. National Strike Force Coordination Center (NSFCC) and Pacific Area Strike Team (PIAT) alerted, assets requested including PST COMCEN, OWOCR'S, storage equipment. CG Public Information/Affairs Team (PIAT) dispatched.

RP notifies bird rescue/wildlife coordinators.

RP places dispersant aircraft on standby and moves them to Santa Barbara. ETA +6 hours.

Address health and safety issues for response personnel and community-at-large. Site characterization team on scene developing site safety plan and identifying health and safety issues. Site entry plan completed.

2) 02-04 hours:

Evaluate spill from aircraft to determine size.

RP mitigating casualty as per SOP'S. No further discussion on casualty for the purposes of this scenario.

RP establishes a command post at MSRC Port Hueneme/CG and OSPR set up initial command post at MSRC.

Identified Elwood pier as primary staging area; secondary staging Clean Seas yard, MSRC, Gaviota pier.

Receive SSC initial oil spill trajectory. Present indications are that Pt. Bennett and San Miguel Island are at risk. Estimated time of impact is approximately 48 hours from time of spill.

Establish close liaison with NPS and Marine Sanctuary.

Start active planning and prioritizing of resources at risk.

Establish safety zones, Broadcast Notice to Mariners, airspace safety separation scheme. Address applicable waterways management issues. CG platform o/s.

RP mobilizes 50 shoreline workers for first light operations. Establish Channel Islands Task Force to identify protective booming, pre-cleaning measures, and make recommendations.

**3) 04-06 hours.**
RP Activates Hazardous Waste operations and Emergency Response (HAZWOPER) training program at MSRC staging site.
Components of UCS forming.

ROSS airborne and transmitting images. Dispersant aircraft on deck at Santa Barbara airport.

Response resources arriving on-scene, Mr. Clean and Mr. Clean II conducting limited operations due to weather. Open water containment efforts being executed as weather allows. Clean Seas/MSRC has deployed 4,500 feet of boom offshore.

Alternate Response Technologies (ART) options considered (dispersants and in-situ burning specifically addressed).

4) 06-10 hours:

California responder o/s. Open water de-rated skimming capacity approximately 40,000 barrels a day. Four Clean Seas boom boats (45 feet in length) are o/s. Activate additional 10 FORT vessels. Clean Seas and MSRC barges o/s (total storage capacity @ approximately 50,000 barrels).

NOAA trajectories arrive and data evaluated. Trajectories confirm initial conclusions and beach impact estimated for P.M. 22 Feb in vicinity of San Miguel Island. Maximizing open water recovery efforts/equipment.

Components of UCS continue to connect to SONS organization.

Operations decisions made based on current info. Response priorities established/detailed and based on recommendations of Channel Islands Task Force. Prioritize staging operations.

Procure area shore side cleanup assets (equipment/personnel). Make initial contacts with shoreline cleanup contractors. Establish active liaison with command post.

Notify Navy assets in Port Hueneme and Air Force assets at Vandenberg AFB, and establish liaisons for air traffic separation scheme and air safety plans.

Activate volunteer portion of Area-Contingency Plan.

Mobilite wildlife recovery equipment.

Additional CG assets arriving in area/on-scene, e.g. Pacific Strike Team (PST), Cutters, additional aircraft, District Response Advisory Team (DRAT), etc.

5) 10-14 hours:

Decision made to allow use of dispersants on SW leading edge of spill to limit impact on San Miguel. In situ burning determined to be impractical in current weather conditions.

Clean Seas vessels on-scene to begin open water recovery response; open water de-rated at approximately 60,000 barrels per day. Plans for beach pre-cleaning and staging are ongoing.

6) 14-18 hours:

Pacific Responder o/s (at hour 14). Activate 10 FORT vessels for first light operations. open water recovery remains limited due to weather.

Interagency Shoreline Cleanup and Assessment Teams (SCATS) established for first light evaluations. Three Vessels of Opportunity Skimming System (VOSS) arrive o/s.

Elements of UCS are starting to address numerous details.

Decisions made on staging equipment, recovery plan, and waste stream plan.

Public information staff coordinates first Press Conference. They begin to issue periodic, updated press releases.

Regular overflight schedule established.

Establish daily UCS meetings. Morning meeting conducted. Local government involvement being coordinated by OSPR. Joint Command Post to be established at MSRC.

First light overflight information and observations being compared to trajectory and ROSSS data. Conclusions support beach impact by late afternoon 22 Feb, in the vicinity of Pt. Bennett. Navy SUPSALV demobilized.

Managing incoming resources (personnel/equipment) at primary staging area. Day/work boat cleaning and other vessel support and logistics being coordinated at Port Hueneme.

All elements of UCS are continuing to address numerous issues.

Air Operations plan on-line prioritizing overflight schedule/needs.

Natural Resource Damage Assessment (NRDA) personnel arriving, forming teams, and developing sampling plan/coordination. Network for marine mammal rehab notified. Initial recovery teams identified for bird recovery/rehabilitation.

Onshore facilities for disposal identified.
Joint investigative teams established.

Finance section on-line and operating. National Pollution Funds Center personnel arrive.
Mobile communications suites arriving at MSRC for subsequent re-deployment (e.g. MSRC, OES, PST, etc.)

NOTE: This response strategy focuses on the events leading up to the full establishment of the UCS organization. From the point of UCS organization coming on-line, it deals principally with the operation issues and does not specifically address the details of each of the support functions/components. These are further described in the appropriate annexes to this plan.

7) 18-30 hours (Day 2 from 1000):

Weather continues to preclude full capacity open-water recovery.

ROSSS over flights continuing.

All UCS support activities continue.

Application of dispersants begins.

Channel Islands Task Force continues to evaluate and make recommendations to UCS.

8) Day 3:

Spill impacts San Miguel Island/Pt. Bennett. Implementing recommendations of Channel Islands task force, including concentrating open water recovery efforts on western edge of spill. 20,000 feet of open water boom deployed and configured to minimize impact on Channel Islands. Small boats and smaller skimmers positioned in key locations around Channel Islands in near shore zones. Diversion booming installed at Pt. Bennett. Beach pre-cleaning as NPS authorizes.

At the end of day three, it is estimated that 45% of the discharged 2,200 barrels has evaporated (35%)/naturally dissipated (10%). 55% (1,210 bbls) remain. Emulsification factor is 1.8. The result is an estimated 2,200 barrels of oil to recover. With adverse weather having limited operations into day 3, approximately 1,600 barrels have been recovered in open water operations at end of day three. 600 barrels remain. It is estimated that dispersant application is 30% effective and has effected and additional 180 barrels, leaving approximately 420 barrels yet to be recovered. All oil recovered in open water is sheen and small patches, which have evaded mechanical and dispersant efforts.

Over flights continue.

Daily morning and evening command briefs scheduled/on-line.

SCATS actively evaluating and recommending shoreline cleanup strategies for San Miguel Island. Conducting beach assessments for all impacted and potentially impacted beach areas.

9) Day 4:

SCATS continue to evaluate and recommend shoreline cleanup strategies for San Miguel Island.

Open water recovery assets, MSRC demobilized. Clean Seas vessel remains offshore.

Securing secondary staging areas.

Cleanup of vessel and response equipment an important issue. Plans developed to facilitate effective equipment cleaning during demobilization phase of open water recovery efforts.

Over flights continue.

10) Day 5:

Securing/demobilizing Clean Seas vessel.

Task force continues to assess and recommend Channel Island clean up actions for ongoing operations.

Morning and afternoon briefings continue.

Over flights continue.

Vessel cleaning continues in Port Hueneme.

**9450.11.11 Major Resource Requirements:**
Santa Miguel Island - 50 workers.

Open water - 20,000 feet of boom;

Nine major OSRV'S, eleven Navy SUPSALV vessels, and at least two tugs and barges to transfer to.

**9450.11.12 Shortfalls:**
1. Quantity and stockpiled dispersant may not be best dispersant for a given product. COREXIT 9527 is currently stockpiled.

2. Availability of other dispersants unknown.

3. Availability of trained local volunteers and workers will be time-dependent. Initially, the number of trained volunteers and workers will be finite. As the spill progresses through time, OSHA training. classes can be continuously conducted for arriving, untrained personnel. This scenario has identified a need for 50 shoreline workers.

4. Availability of small workboats and trained operators will limit efforts in the many inaccessible portions affected by this scenario (i.e. San Miguel Island)

5. Potential conflicts between investigative actions and cleanup efforts. For example, any legally imposed requirement associated with NRDA or recovered oil amount and effects may hamper/limit-cleaning operations.

6. Uncertainty as to availability of cascadable equipment due to regulations, permits, and operating limitations of industry in other areas from which the OSRV's are drawn. This scenario presumed the availability of all cascadable 9 major OSRV'S.

7. Offshore decontamination of vessels and equipment may be a regulatory issue whereby effective means of removing oil from vessels may be hampered. Vessels required to come into port for cleaning reduce time in active skimming ops, thus reducing further the iterated capacity of the skimmers.

8. Deployment of public equipment, i.e. NSF OWOCRs (who/how) needs to be addressed. RP's not required to plan for this in current contingency plans.

### 9450.11.13 Potential Resource Shortfall Analysis

Under Commandant Note 16471, dated September 30, 1992, the Area Committees are tasked as part of their ongoing work to "...describe shortfalls, including administrative and policy shortfalls, and options for alleviating them (including): equipment, personnel, funds, minimum response times, location and identification of additional resources." In support of this requirement, the Coast Guard joined forces in 1994 with the state of California to investigate the issue of potential shortfalls.

In addition to providing important information to responders and planners on the west coast, this shortfall data is expected to also have a potential use for the state of California in meeting this requirements. Under the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (Section 8670.19 of the Government Code) the Administrator shall "...conduct a comprehensive review of all oil spill contingency plans for each area to determine if deficiencies exist in equipment, personnel, training, and other areas determined to be necessary to ensure the best achievable protection of the coastline."

This requirement, which has been named the Coastal Protection Review (CPR), will examine the plans and make conclusions on the adequacy of protection systems throughout California marine waters. Since the Vessel and Facility Contingency Plans will heavily reference the Area Plans, it follows that the Area Plans themselves will be a good source of information for the State's CPR. Given the joint need for this information by both the USCG and the State of California, a decision was made by the senior management of both organizations to work together and gather whatever information was possible on potential shortfalls.

This section describes the general, or most obvious, potential shortfalls that have been determined to exist by the members of the Area Committees. Where appropriate, possible options for alleviating the identified shortfalls have been suggested. These conclusions have been reached by the committee reviewing scenario and trajectory information contained in the Area Plans and examining it in detail. Wherever a perceived shortfall has been identified in equipment, personnel, policy or other areas it has been documented.

Work is proceeding in this area continuously and more information with regards to potential resource shortfalls is expected to be completed by October, 1994. It is the goal of the Area Committees to produce a more analytical and detailed shortfall analysis by this date, using a specific methodology to be developed. If this more specific shortfall analysis can be produced as planned, it will be mailed out as an errata at that time (any questions as to whether an errata was produced for the 1994 Area Plans on shortfalls can be directed to the OSPR Planning Branch at 916-327-9988).

### 9450.11.14 Area Specific Shortfall Analysis

The following is the general shortfall analysis, by category, for San Luis Obispo, Santa Barbara, and Ventura Counties. For this analysis, the Chevron Estero Bay Maine Terminal potential worst-case scenario was used. This worst case scenario is based on he following: loaded tanker loses entire cargo (380,000 barrels of San Joaquin Valley Crude); vessel grounds on rocky coast around Point Buchon; areas at risk include Point Sur south to Point Conception; and spill occurs during spring time.

### 9450.11.15 Notification Shortfalls

During previous spills in the area, County Office of Emergency Services, Harbor Patrol, Archaeologists, Northern Chumash Council and the Site Safety Officer have not been immediately notified.

If a spill occurs during off-hours the response by an OSPR field biologist may be delayed due to the current on-call schedule policy. This policy calls for only one biologist to be on-call for the southern California area (and one for northern California) during off hours (weekends, holidays and after hours). That person may be as far away as San Diego, a commute time of approximately six hours. It is likely that other biologists who are located closer to a give spill site can and will be reached but technically, this is not guaranteed.

### 9450.11.16 Beach Access Shortfalls

There are some sites for which protection strategies have been developed but which are not accessible by heavy equipment. These sites include: Broken Bridge Creek (A-4-148); Little Pico Creek (A-4-108); Pico Creek (A-4-110); Santa Rosa Creek (A-4-112); Cayucos Creek (A-4115); San Antonio Creek (A-4-004); and La Honda Creek (A-4-070).

A Memorandum of Understanding (MOU) is needed with the State Department of Parks and Recreation for beach access onto State Parks, e.g. Arroyo del Puerto Inlet (A-4-146), San Simeon Creek (A-4-111), Leffingwell Creek (A-4-146), Santa Rosa Creek (A-4-112), Cayucos Creek and State Beach (A-4-115 & 116), and Morro Strand State Beach (A-4-117, 118 & 136). Pre-designated access routes/corridors for crews and heavy equipment are needed to avoid sensitive sites (biological and cultural).

Not all landowners are known and/or have been contacted. The following site occur on private property: San Carpoforo Creek (A-4-100), Arroyo de la Cruz Inlet (A-4104), Arroyo del Oso Creek (A-4-149), the sandy beach south of Piedras Blancas lighthouse (A-4-102), Oak Knoll Creek (A-4-147), Broken Bridge Creek (A-4-148), Little Pico Creek (A-4-108) and Villa Creek (A-4-114).

Access by some response personnel to the coastline along Vandenberg Air Force Base may be delayed due to Base security issues.

### 9450.11.17 Planning Shortfall

Section 3300's Check-off Lists need to be a stand-alone document.

### 9450.11.18 Personnel Shortfall

There is currently no mechanism for maintaining large numbers of HAZWOPER trained personnel for oil spill cleanup, especially for shoreline cleanup, and wildlife rehab personnel. In a spill of this magnitude, adequate numbers of personnel would not be available.

The number of OSPR field staff would be a shortfall with a large spill such as in this scenario.

### 9450.11.19 Airfield Shortfall

The only large landing strip in San Luis Obispo county to bring in equipment on a C-130, which is used by the USCG Pacific Strike Team, is the Paso Robles Airport, which is approximately 45 miles east of the nearest coastline. This lag time is a potential shortfall. A MOU exists between San Luis Obispo County and Camp San Luis enabling the use of the National Guard for helicopter over flights, per the colonel's discretion.

### 9450.11.20 Information Shortfall

Not all sensitive sites have been visited such as Diablo Canyon (A-4-137) and Rocky Platform (A-4-132).

Environmentally sensitive sites in the back bay of Morro Bay (A-4-119) need to be mapped and response strategies developed.

Local ocean current data (tides and eddies) is lacking.

OSPR does not currently have set cleanup levels. During past spills, Regional Water Quality Control; Board cleanup levels have been used. If cleanup levels (other than visually clean) are to be made in the field, field equipment needs to be provided.

### 9450.11.21 Technology Shortfall

There is a lack of technology to protect rocky cliffs, rock platforms, and sandy beaches with moderate to high-energy regimes. The following sites fall under this category: La Cruz Rock (A-4-103), Point Piedras Blancas (A-4-101), Piedras Blancas Sandy Beach (A-4-102), Rocky Platform (B-4-106), Rock Offshore Little Pico Creek (A-4-109), Rocky Platform, Cambria Air force Base (B-4-132), Rocky Platforms (B-4-133 and 134), Cayucos Point (B-4-113), Morro Strand State Beaches (A-4-117 & 118), Morro Bay Sand Pit (B-4-135), Lion Rock (A-4-123), Deer Canyon Rocky Platform (B-4-138), Pecho Rock (B-3-124), Avila Rock (B-4-139), Bird Rock (A-4-140), Rocky Platform (B-4-141), Pismo Beach (B-3-142), Pismo-Oceano Beach Clam Reserves (A-4-129 & 143), Guadalupe Beach (B-3144), Point Arguello (A-4-008), And Point Conception (B/A-4-010).

The effectiveness of existing technology and equipment for open water containment, storage, and recovery is limited and dependent upon conditions such as wind and currents.

In-situ burning and dispersant technologies including dispersant quick approval zones are still being developed. Success of these technologies depends, in large part, on having an adequate number of appropriately trained personnel to implement them.

### 9450.11.22 Equipment Shortfall

There may be a shortfall of heavy equipment operators that are HAZWOPER trained, and therefore, there may be a shortage of heavy equipment available. Oil Spill Response Organizations do not have prearranged contracts with heavy equipment operators, and therefore, there could be a time lag for delivery of heavy equipment. This could be especially true with large spills. There are approximately 22 creeks in this area of impact with the suggested response strategy being a sediment dike, most of which if not all, would require heavy equipment for construction.

There are a few creeks where at times, lack of sand would make it difficult or impossible to construct a sediment dike. These creeks include Oak Knoll Creek (A-4-147), Arroyo del Puerto Creek (A-4-107), Little Pico Creek (A-4-108), Cayucos Creek (A-4-115), Little Cayucos Creek (B-4-116) and La Handa Creek (A-4-070). Sand bags could be used, but would take more time.

Equipment for open water containment, recovery, and storage is a potential shortfall.

There is a lack of Fire Boom necessary for any in-situ burning that may be approved.

Since most oil spill response equipment is located in Santa Barbara and Ventura County's, the added time to transport equipment to San Luis Obispo County is a potential shortfall.

### 9450.11.23 Wildlife Rehabilitation Shortfall

The OSPR Guidance Document "For Oiled Wildlife Care" released in 1993 reported on the existing capabilities of wildlife rehabilitation organizations in California to rescue, transport, clean, treat and rehabilitate oiled marine wildlife. The results were based upon surveys, site visits by OSPR staff, and information provided by the organization.

In a separate analysis, OSPR used information concerning the numbers of marine wildlife rescued during recent west coast oil spills, the distribution and abundance of California's marine birds and mammals, their vulnerability to oil, and their proximity to areas of special concern for oil spill risks to project probable rehabilitation case loads. The differences between existing capabilities and projected caseloads represent the shortfall in oil spill response capabilities at this time.

California legislation enacted in 1993 would create an oiled wildlife care network by 1997 if funding is forthcoming. At this present time, however, under any spill scenario, existing capabilities fall far short of probable wildlife rehabilitation caseloads.

In OPA Planning Area Ventura, Santa Barbara and San Luis Obispo County's, there are existing capabilities to care for about 250 birds. OSPR has projected rehabilitation caseloads of up to 4,000 birds. In this Planning Area there is currently a deficiency of supplies, materials, equipment and facilities to care for 3,750 birds. Maine mammal care facilities are available at the Marine Mammal Center of Santa Barbara, however, seasonally the Center reaches capacity and no specific provisions have been made to care for oiled marine mammals.

## 9450.2 Southern Sector

### 9450.21.1 Worst Case Discharge

The Tank Vessel CINATIT (VLCC) enters the southbound shipping lane just north of green bell buoy "7" (TL) from the seaward side. It is steaming at 9-10 knots, its cargo is approximately 1.5 million barrels of North slope crude. A collision occurs with the foreign container vessel LIPTON that is on the wrong side of the lane. The collision ruptures four of the CINATIT's tanks and causes an engine room explosion that weakens the vessel's keel. Two of the LIPTON's port side fuel tanks are leaking fuel, but have not yet caught fire. All efforts to salvage the CINATIT fail and the ongoing fire prevents lightering. The CINATIT breaks in two, the stern portion quickly sinks, and the bow, with four leaking tanks, but intact, drifts at water's edge.

The incident occurs on February 19 at midnight. The winds blow at 20 kts from the SE on Feb 19, the first day of the oil spill. On Feb 20, they shift from the SE to the S, then to the NW, then to N. The winds return to blow out of the NW at midnight on the morning of Feb 21, and remain from the NW at 15 kts for the rest of the modeled spill.

Affected/potentially affected areas throughout the course of this scenario include:

1) Santa Catalina;

2) The LA/LB Port Complex including Least Tern Nesting Site;

3) Santa Monica Bay South beaches and Palos Verdes;

4) San Clemente Island;

5) All Orange County shoreline and Bolsa Chica Wetlands,

and;

6) San Diego County shoreline.

The required response action elements are presented in chronological sequence. These include initial actions, spill response organization, containment, countermeasures and cleanup strategies, resource requirements, available resources and sources of procurement, time necessary for cleanup, disposal options and procedures and criteria for terminating the response activity. The following response strategy for this scenario and the estimated times are for planning purposes only and do not reflect performance standards.

1) 0-2 Hours.

CG receives notification from the T/V CINATIT via CH16 at 0000, 19 Feb. Vessel reports its location and condition as per above scenario, states their intentions, and establishes comms schedule.

CG initiates Search and Rescue (SAR) and firefighting response per District Eleven SAR Plan and SECTOR LA/LB Firefighting Contingency Plan. CG helicopter launched from LAX. Search and rescue concerns are at all times priority and exclusive of all other concerns. For the purposes of this response strategy, search and rescue efforts are directed by the Group and not addressed in this plan.

CG initiates external and internal notifications including CA Office of Emergency Services (OES), CA Dept of Fish and Game (F&G) Oil Spill Prevention Response (OSPR), and CG District Eleven (D11). CG/OSPR initiates internal recalls/mobilizes Unified Command System (UCS) and Incident Command System (ICS) and D11 activates the Regional Response Team (RRT). Notify Scientific Support Coordinator (SSC) and mobilize SSC network. All response entities make notifications as per internal directives.

CG SECTOR LA/LB (pre-designated Federal on Scene Coordinator (FOSC)) initiates pollution and casualty investigation efforts. Initial investigators enroute via designated SAR platform, i.e. 82-patrol boat, 180 cutter, 210 cutter, or 378 cutter. ETA for CG/OSPR representatives, 2 hours. OSPR investigators contacted and rendezvous established.

Confirmed vessel is of foreign registry and operation. Responsible Party (RP) and vessel qualified individual identified for the cleanup. FOSC requests to access Oil Spill Liability Fund in the amount of $30 million. Approval granted, fund ceiling to be continually reevaluated. FOSC notifies RP of federal assumption. CG initiates oil spill cleanup efforts. Regional open water recovery assets contracted and dispatched including Clean Coastal Waters, Marine Spill Response Corporation (MSRC), Clean Seas, and Navy SUPSALV. Weather limits vessels, which can safely operate offshore. Clean Seas alerts dispersant aircraft/helo dispersant system. Estimated on-scene arrival times for Oil Spill Recovery Vessels (OSRV):

Clean Waters I +2.5 hours

Recovery I and II +2.5 hours

MR Clean +8 hours

Mr Clean II +12 hours

Mr. Clean III +6 hours

California Responder +6 hours

Pacific Responder +24 hours

MSRC OSRV fm Astoria +76 hours

11 Navy SUPSALV Marco V skimmers +48 hours

Three VOSS vessels fm LA-LB +6 hours

Clean Seas barges +4 hours

MSRC barges +8 hours

Remote Oil Spill Sensor System (ROSSS) called out. Area Contingency Plan (ACP) Airops plan activated. Fishermen's Oil Response Team (FORT) notified and 10 vessels called out. Thirty FORT vessels are placed on standby.

ACP Comms plan activated.

Initial press release issued. District Eleven public affairs staff establishes press operations. National Strike Force Coordination Center (NSFCC) and Pacific Area Strike Team (PIAT) alerted, assets requested including PST COMCEN, OWOCR's, salvage pumps, storage equipment. CG Public Information/Affairs Team (PIAT) dispatched.

RP/CG notifies facilities with water intakes in the area.

RP notifies bird rescue/wildlife coordinators.

2) 02-04 hours:

Evaluate ships' diagrams and intentions. Assess vessel's current status and identify cargo and condition. Salvage issues are being actively addressed. Tugs dispatched to assist the vessels as necessary.

Clean Waters I, Recovery I and II o/s.

Address health and safety issues for response personnel and community-at-large. Site characterization team on scene developing site safety plan and identifying health and safety issues. Site entry plan completed.

Establish initial Joint Command Post for UCS at Marine Safety Office LA/LB. Identify primary staging area.

Receive initial information and situation report from CG platform and aircraft. Request CG Aireye support.

RP/Qualified Individual initiates ICS and internal response org.

Alert aircraft and schedule ROSSS over flights for assessment.

The CINATIT breaks in two and the stern sinks, leaving the bow awash with four leaking tanks.

Receive SSC initial oil spill trajectory.

Start active planning and prioritizing of resources at risk. Preventative booming plan/staging initiated for priority areas (Ballona Creek, Marina Del Rey, Malibu Creek, Bolsa Chica Wetlands, Alamitos, Newport Bay, etc.)

Establish safety zones, Broadcast Notice to Mariners, airspace safety separation scheme. Address applicable waterways management issues.

Initiate salvage operations. Tugs dispatched to handle floating bow and assist LIPTON as necessary.

3) 04-06 hours:

RP Activates Hazardous Waste Operations and Emergency Response (HAZWOPER) training program at primary staging site.

Components of ICS/UCS forming.

Health and safety parameters established.

Response resources arriving on-scene. Unable to conduct operations due to weather.

Alternate response technologies (ART) options considered (dispersants and in-situ burning specifically addressed).

First light over flights. Tracking Datum Marker Buoy (DMB) deployed by SAR resources.

4) 06-10 hours:

First light over flights and data evaluated. Trajectories indicate landfall a few days away. Maximize open water recovery efforts/equipment. Mobilize Pacific Coast open-water recovery assets

MSRC Astoria +42 hours

Clean Bay +24 hours

Clean Sound +66 hours

MSRC Hawaii +7 days

FOSC declares Spill of National Significance (SONS). Components of UCS meet with SONS organization.

Initial local/regional callouts at predesignated locations (i.e. Marina del Rey, Palos Verdes point, command post, Bolsa Chica, etc.).

Operations decisions made based on current info. Response priorities established/detailed and mobilized for shoreline i.e. shoreline workers. Prioritize staging operations. Establish primary Staging Area. Recognizing the sensitivity of Santa Monica Bay, decision made not to use dispersants except on leading edge of the spill to mitigate progress of spill in the direction of Santa Catalina Island.

Mobilize Navy assets in Port Complex and San Diego e.g. boom, skimmer.

Activate volunteer portion of Area Contingency Plan.

Mobilize wildlife recovery system.

Procure area shore side cleanup assets (equipment/personnel). Make initial contacts with shoreline cleanup contractors. Establish active liaison with command post.

Additional CG assets arriving in area/on-scene, e.g. Pacific Strike Team (PST), Cutters, additional aircraft, District Response Advisory Team (DRAT), etc.

5) 10-14 hours:

Fishing vessels/vessels of opportunity identified. Three Vessels of Opportunity Skimming System (VOSS)'s dispatched. Decisions made on how to handle "day" boats, i.e. cleaning, logistics, support. Establish boat cleaning at King Harbor, logistics section at King Harbor, crew relief, etc.) Line up storage barges.

Elements of ICS/UCS are starting to address numerous details.

Regular overflight schedule established.

Open-water recovery vessels arriving as per ETA's in 0-2 hours.

6) 14-18 hours:

Public information staff coordinates first Press Conference.

Water intakes identified and company's informed/liaison's established with command post.

Establish daily UCS meetings each afternoon. Local government involvement being coordinated by OSPR.

Site Safety Plan developed by Safety Officer. On-scene Safety Officer conducting on-site monitoring.

Public information staff issuing periodic, updated press releases.

Managing incoming resources (personnel/equipment) at primary staging area.

Maintaining protective booming.

Open-water recovery remains infeasible due to weather. Open-water recovery assets continue to arrive. No impact to shoreline as of this time.

Air Operations plan on-line prioritizing overflight schedule/needs.

Natural Resource Damage Assessment (NRDA) personnel arriving, forming teams, and developing sampling plan/coordination. Stranding network for marine mammal rehab notified. Initial recovery teams identified for bird recovery/rehabilitation.

Onshore storage and transfer facilities identified. Tank ship destination a priority site. Storage and transport barges enroute. Onshore facilities for disposal identified.

Planning section identifying National resources/equipment. Assessing real time info to anticipate next actions.

Joint investigative teams established.

Finance section on-line and operating. National Pollution Funds Center personnel arrive.

Mobile communications suites arriving primary staging area for subsequent redeployment (e.g. MSRC, OES, PST, CAMSPAC SF, etc.)

EMS on-site at the primary staging area. Field kitchens and catering contracts established.

NOTE: This response strategy focuses on the events leading up to the full establishment of the ICS organization. From the point of ICS organization coming on-line, it deals principally with the operation issues and does not specifically address the details of each of the support functions/components. These are further described in the appropriate annexes to this plan.

7) 18-30 hours:

Weather continues to preclude open-water recovery. ROSSS over flights continuing.

Clean Seas third OSRV arrives.

All ICS support activities continue.

8) Day 2 (from 0630 20 Feb):

At this point trajectory and overflight information indicate that Santa Catalina Island is at risk. Logistics and planning team dispatched to evaluate options/strategies.

Local shoreline staging decisions made. Secondary staging sites established from Venice Pier south to Palos Verdes for shoreline cleanup efforts including a Field Command Post. Develop shoreline cleanup and protection plan as per site summary information, Annex A, Appendix IV, Tabs B, C & D. Contractors notified to provide 500 shoreline cleanup workers. Pre-cleaning of beaches initiated. Identify and procure kelp cutters for Palos Verdes point. Establish interagency SCAT's (Shoreline Cleanup Assessment Teams). SCAT's develop worksheet and initiate beach surveys.

Beach management issues addressed with local authorities.

MSRC San Francisco OSRV arrives.

Major field command post established on Santa Catalina and liaison with harbormaster established. Contractors put on notice to have 500 shoreline workers available to support Santa Catalina ops.

Morning and Evening command briefs scheduled/on-line.

9) Day 3:

Weather abates and open-water recovery efforts commence. On-scene recovery capacity approximately 90,000 bbls/day. At the end of day three, it is estimated that 30% of the discharged approximately 1.5 million barrels has evaporated/dissipated. A factor of 2 is used for planning purposes to calculate mouse/emulsion for recovery efforts. The result is an estimated two million barrels of oil/water emulsion to recover. In keeping with planning parameters, 50% (approximately 1 million barrels) of this is estimated to impact shoreline and 50% (approximately 1 million barrels) to be recovered via open-water operations. At end of day three, approximately 50,000 bbls have been recovered in open water operations.

Over flights continue.

Three VOSS' on-line.

Develop a diversion boom plan for Santa Catalina Island based on site summary sheet and environmental sensitivity data (Catalina Harbor is boomed). A minimum of 10,000 feet of boom is needed. Identify a major need for small workboat support (boats and operators).

With the potential recognized for the leading edge of the oil to reach Santa Catalina Island, all parties agree that due to harbor seal pupping on the island, dispersant application on leading edge is tested/applied. For the purposes of this strategy, minimal effectiveness is assumed.

Response Task Forces established for Palos Verdes and North, Santa Catalina Island, LA/LB Harbor area.

10) Day 4:

Oil impacts Palos Verdes. Shoreline cleanup workers begin active cleanup. Temporary storage and disposal of shoreline cleanup debris being addressed.

MSRC OSRV from Astoria arrives. Total derated open-water skimming capacity at approximately 100,000 barrels per day.

All elements of UCS continue applicable efforts.

Approximately 100,000 bbls have been recovered in open water operations at end of day four.

11) Day 5:

Oil impacts Santa Catalina Island. Major logistics issues/limited access to shoreline and staging being addressed. Cleanup operations ongoing. Planning section recognizes possibility of impact on San Clemente Island and makes plans for that contingency. Active links with Navy/SECTOR San Diego personnel established. JRT activated. San Clemente Task Force established.

Day five estimate of recovered oil via open water cleanup ops is approximately 140,000 bbls.

12) Day 6-11:

It is estimated from trajectory and wind conditions that Orange County beaches will be impacted by the oil by day 11. Orange County Task Force established.

Santa Catalina and Palos Verdes point cleanup is ongoing.

Beach teams dispatched to Orange County Beaches and SCAT efforts expanded to include these areas. Contractors notified to provide 500 shoreline workers. Beach precleaning begins. Two field command posts are established on Orange County beaches.

San Diego beaches identified as potentially at-risk. San Diego task force established.

At the end of day 11, approximately 344,000 bbls recovered in open water operation.

13) Day 11-29:

Oil impacts Orange County Beaches on day 11 at Huntington/Newport. Active cleanup is initiated. Palos Verdes and Catalina cleanups are ongoing. Daily assessments continue. AM and PM briefings in place. Full SONS on-line.

SCATs provide frequent assessments and make recommendations to UCS for "cleanup complete" segment by segment. FOSC authorizes termination of active cleanup efforts based on SCAT recommendations and all other available info. NRDA teams continue ongoing assessments.

Demobilize task forces as areas are cleaned.

14) Day 30:

Open-water recovery operations completed/secured. Approximately 1 million barrels recovered via open-water ops. SCATs continue efforts in remaining impacted areas. Continued shoreline cleanup as necessary.

Cleanup of vessel and response equipment an important issue. Plans developed to facilitate effective equipment cleaning during demob phase of open-water recovery efforts.

15) Day 31 – Demobilization:

SCATs provide frequent assessments and make recommendations to UCS for "cleanup complete" segment by segment. FOSC authorizes termination of active cleanup efforts based on SCAT recommendations and all other available info. NRDA teams continue ongoing assessments.

### 9450.21.2 Major Resource Requirements

Santa Catalina Island - 20,000 feet of boom; 1,000 workers.

Palos Verdes/Santa Monica Bay beaches - 5,000 feet of boom; 500 workers.

LA/LB Harbor area - 20,000 feet of boom; 500 workers.

Orange County - 20,000 feet of boom; 2,000 workers.

San Diego County - 60,000 feet of boom; 2,000 workers.

Offshore/Open water - 80,000 feet of boom;

San Clemente Island - 20,000 feet of boom; 1,000 workers.

Twelve major OSRVs, eleven Navy SUPSALV vessels, and at least four tugs and barges to transfer to.

### 9450.21.3 Shortfalls

1. No local availability of fire boom. Substantial expense to maintain local stockpile.

2. Quantity and stockpiled dispersant may not be best dispersant for a given product. COREXIT 9527 is currently stockpiled. Availability of other dispersants unknown.

3. Availability of trained local volunteers and workers will be time-dependent. Initially, the number of trained volunteers and workers will be finite. As the spill progresses through time, OSHA training classes can be continuously conducted for arriving, untrained personnel. This scenario has identified a need for 7,700 shoreline workers.

4. Availability of small workboats and trained operators will limit efforts in the many inaccessible portions affected by this scenario (i.e. Santa Catalina, PV Point, San Clemente Island).

5. Potential conflicts between investigative actions and cleanup efforts. For example, any legally imposed requirement associated with NRDA or recovered oil amount and effects may hamper/limit-cleaning operations.

6. Uncertainty as to availability of cascadable equipment due to regulations, permits, and operating limitations of industry in other areas from which the OSRVs are drawn. This scenario presumed the availability of all cascadable 12 major OSRVs.

7. Offshore decontamination of vessels and equipment may be a regulatory issue whereby effective means of removing oil from vessels may be hampered. Vessels required to come into port for cleaning reduce time in active skimming ops, thus reducing further the derated capacity of the skimmers.

8. Deployment of public equipment, i.e. USCG's VOSS (who/how) needs to be addressed. RP's not required to plan for this in current contingency plans.

### 9450.21.4 Maximum Most Probable Discharge

The Tank Vessel FRACTURED is offloading North Slope Crude on 19 February at the El Segundo Marine Terminal. The vessel discovers it is leaking oil and estimates approximately 3,000 barrels of North Slope Crude has entered the water from a suspected crack in the hull below the waterline.

The incident occurs on February 19 at midnight. The winds blow at 20 kts from the SE on Feb 19, the first day of the oil spill. The seas are 8 - 10 feet. On Feb 20, they shift from the SE to the S, then to the NW, then to N. The winds return to blow out of the NW at midnight on the morning of Feb 21, and remain from the NW at 15 kts for the rest of the modeled spill.

Affected/potentially affected areas throughout the course of this scenario include:

1) Marina Del Rey;

2) Ballona Creek;

3) King Harbor;

4) All Santa Monica Beaches and Malibu/Topanga Beaches.

The required response action elements are presented in chronological sequence. These include initial actions, spill response organization, containment, countermeasures and cleanup strategies, resource requirements, available resources and sources of procurement, time necessary for cleanup, disposal options and procedures and criteria for terminating the event. The following response strategy for this scenario and the estimated times are for planning purposes only and do not reflect performance standards.

1) 0-2 Hours:

CG receives notification from the T/V FRACTURED via CH16 at 0000, 19 Feb. Vessel reports its location and condition as per above scenario, states their intentions, and establishes comms schedule. Vessel estimates approximately 3,000 barrels may have been released. Responsible party and qualified individual are identified for the cleanup. Responsible party stops all transfer operations and actively pursues effort to identify source including hiring divers. Facility draws back on pipeline and investigates possibility of pipeline damage.

CG initiates external and internal notifications including CA Office of Emergency Services (OES), CA Dept of Fish and Game (F&G) Oil Spill Prevention Response (OSPR), and CG District Eleven (D11). CG/OSPR initiates internal recalls/mobilizes Incident Command System (ICS) and Unified Command System (UCS) and D11 activates the RRT. Notify Scientific Support Coordinator (SSC) and mobilize SSC network.

CG SECTOR LA/LB (predesignated Federal on Scene Coordinator (FOSC)) initiates pollution and casualty investigation efforts. Initial CG and OSPR investigators enroute via designated CG/RP platform.

Confirmed vessel is of United States registry. RP and qualified individual are identified for the cleanup. Responsible party (RP) initiates internal recall and implements their plan. FOSC requests to access Oil Spill Liability Fund in the amount of $500,000. Approval granted, fund ceiling to be continually reevaluated. RP initiates oil spill cleanup efforts including, for example, immediate booming of the vessel/area-using boom from support vessel maintained on-scene as weather permits. Regional open-water recovery assets contracted and dispatched including Clean Coastal Waters, Marine Spill Response Corporation (MSRC), Clean Seas, and Navy SUPSALV. Weather limits, which vessels can safely operate offshore. Clean Coastal Waters alerts dispersant aircraft/helo dispersant system (+6 hours). Estimated on-scene arrival times for Oil Spill Recovery Vessels (OSRV):

Clean Waters I +3.5 hours

Recovery I and II +4.5 hours

MR Clean II +7 hours

California Responder +6 hours

11 Navy SUPSALV Marco V skimmers +48 hours

Clean Coastal Waters dispatches four Recon boats. Remote Oil Spill Sensor System (ROSSS) notified. Area Contingency Plan (ACP) Airops plan activated. Fishermen's Oil Response Team (FORT) notified and 10 vessels called out. Thirty FORT vessels are placed on standby.

ACP Comms plan activated.

Initial press release issued. District Eleven public affairs staff establishes press operations. National Strike Force Coordination Center (NSFCC) and Pacific Area Strike Team (PIAT) alerted, assets requested including PST COMCEN, OWOCR's, salvage pumps, storage equipment. CG Public Information/Affairs Team (PIAT) dispatched.

Preventive booming plans for Marina Del Rey, King Harbor and Malibu Creek activated. Responsible party mobilizes 200 shoreline workers for first light. Primary staging area and RP command post established at Chevron Beach Center.

RP/CG notifies facilities with water intakes in the area.

RP notifies bird rescue and wildlife coordinators.

2) 02-04 hours:

Evaluate ship’s diagrams and intentions. Assess vessel's current status and identify cargo and condition. Tugs dispatched to assist the vessel as necessary.

Address health and safety issues for response personnel and community-at-large. Site characterization team on-scene developing site safety plan and identifying health and safety issues. Site entry plan completed.

Receive initial information and situation report from CG platform and aircraft. Request CG Aireye support.

Alert aircraft and schedule ROSSS over flights for assessment.

No additional oil appears to be entering the water. Tank testing for water indicates crack in hull of one of the vessel's cargo tanks.

Receive SSC initial oil spill trajectory. Indicates all of Santa Monica Bay at risk. RP organizing an additional 300 workers for beach pre-cleaning and staging at first light.

Establish safety zones, Broadcast Notice to Mariners, airspace safety separation scheme. Address applicable waterways management issues.

Start active planning and prioritizing of resources at risk. Preventative booming plan/staging ongoing for priority areas (Ballona Creek, Marina Del Rey, Malibu Creek, King Harbor).

200 California Conservation Corps personnel called out.

3) 04-06 hours:

RP activates Hazardous Waste Operations and Emergency Response (HAZWOPER) training program at primary staging site.

Components of UCS forming. Establish initial Joint Command Post (UCS) at Chevron Beach Center.

Preliminary on-site hazards assessment completed by RP. Health and safety parameters, characterization, and site safety plan completed.

Response resources arriving on-scene (Clean Waters, California Responder, Recovery 1 and 2; approx. 57,000 per day derated skimming capacity). Operations limited due to weather. Mobilizing three Vessels of Opportunity Skimming System (VOSS) in LA/LB (approximately 9,500 bbl per day derated skimming capacity; ETA +18 hours). Fishing vessels and vessels of opportunity identified Mariner's Oil Spill Team (MOST).

Alternate Response Technologies (ART) options considered (dispersants and in-situ burning specifically addressed).

First light over flights. ROSSS airborne and transmitting images. Marina Del Rey, Ballona Creek, and King's Harbor boomed. RP hiring storage barges from LA/LB (approximately 20,000 bbls storage capacity - +6 hours).

Vessel repair plans initiated. For the purposes of this response strategy, repair activities are not discussed further.

4) 06-10 hours:

First light over flights and data being evaluated. Oil impacts Dockweiler Beach and Marina Del Rey breakwater. Beach cleaning resources dispatched to impacted areas. Secondary staging area established at Dockweiler. Workers continue to stage arriving equipment at primary staging area. Second Mr. Clean (Clean Seas vessel) arrives on-scene. MSRC Pacific Responder (San Francisco) put on alert.

FOSC declares Spill of National Significance (SONS). Components of UCS meet with SONS organization.

Operations decisions made based on current info. Response priorities established/detailed and mobilized for shoreline i.e. shoreline workers. Prioritize staging operations. Establish additional secondary staging areas.

Activate volunteer portion of Area Contingency Plan.

Mobilize wildlife recovery system. Network for marine mammal rehab notified.

Additional CG assets arriving in area/on-scene e.g. Pacific Strike Team (PST), Cutters, additional aircraft, District Response Advisory Team (DRAT), etc.

Regular overflight schedule established.

Public information staff coordinates first Press Conference.

5) 10-14 hours:

Elements of UCS are starting to address numerous details. UCS command level briefing conducted each morning.

Preventive measures completed at Malibu Creek.

Recognizing the sensitivity of Santa Monica Bay, decision made not to use dispersants.

Decisions made on how to handle "day" boats i.e. cleaning, logistics, support. Establish boat cleaning at King Harbor, logistics section of King Harbor, crew relief, etc.)

Site Safety Plan developed by Safety Officer. On-scene Safety Officer conducting on-site monitoring.

6) 14-18 hours:

Oil impacts Malibu beaches vicinity of Malibu Creek. Identify and organize interagency SCAT's (Shoreline Cleanup Assessment Teams). SCAT's develop worksheet and initiate beach surveys.

Establish daily UCS meetings PM and AM. Local government involvement being coordinated by OSPR.

Public information staff issuing periodic, updated press releases.

Managing incoming resources (personnel/equipment) at primary and secondary staging areas.

Maintaining protective booming.

Open-water recovery remains limited due to weather.

Air Operations plan on-line prioritizing overflight schedule/needs.

Natural Resource Damage Assessment (NRDA) personnel arriving, forming teams, and developing sampling plan/coordination. Initial recovery teams identified for bird recovery/rehabilitation.

Onshore storage and transfer facilities identified. El Segundo Marine Terminal a priority site. Storage and transport barges o/s. On-shore facilities for disposal identified. Assessing real time info to anticipate next actions.

Joint investigative teams established.

Field command post established in Malibu.

Finance section on-line and operating. National Pollution Funds Center personnel arrive.

Mobile communications suites arriving primary staging area for subsequent redeployment (e.g. MSRC, OES, PST, CAMSPAC SF, etc.). One dispatched to Malibu.

NOTE: This response strategy focuses on the events leading up to the full establishment of the UCS organization. From the point of UCS organization coming on-line, it deals principally with the operation issues and does not specifically address the details of each of the support functions/components. These are further described in the appropriate annexes to this plan.

7) 18-30 hours:

Weather continues to limit open-water recovery. ROSSS over flights continuing.

All UCS support activities continue.

8) Day 2 (from 0600 20 Feb):

At this point, oil has impacted approximately 5-10 miles of Malibu Beaches/Santa Monica Bay Beaches.

Secondary staging sites established from Venice Pier south to Palos Verdes for shoreline cleanup efforts including a Field Command Post. Develop shoreline cleanup and protection plan as per site summary information. Identify and procure kelp cutters for Palos Verdes Point.

Morning and Evening command briefs scheduled/on-line.

At the end of day two, it is observed that most of the oil remaining on the open water is lightly concentrated or mostly sheen. The Pacific Responder is stood down and Navy SUPSALV is secured. Recovery from open-water skimming operations is estimated as 250 bbls given limited ability to operate effectively in the weather conditions stated with a rapidly spreading/thinning oil.

9) Day 3:

Weather abates and open-water recovery efforts continue. On-scene derated recovery capacity estimated at approximately 80,000 bbls/day. However, all that remains in the open water is heavy sheen. Open-water skimming becomes marginally effective under these conditions. At the end of day three, it is estimated that 52% of the discharged 3,000 barrels has naturally dispersed (approximately 1,600 bbls). It is also estimated that 1,050 bbls has evaporated. At the end of 24 hours, the water content of the discharged oil was approximately 75%. This leaves, at the end of day three, approximately 670 bbls of recoverable oil. Using standard planning tool of 50% on the beaches and 50% in open water, it is estimated that at the end of day three approximately 335 bbls would have remained in the water had no recovery been accomplished, and 335 bbls impacted the shoreline.

Shoreline impact ranges from Malibu down to Dockweiler with heavier concentrations of oil in the Malibu area. Impacted shoreline is affected by "stripes" of oil ranging from 3 inches wide to 3 feet wide and spotty. Approximately 10-15 miles of beach are impacted. SCAT's actively evaluating and recommending shoreline cleanup strategies and determining "how clean is clean" (signing off) segment by segment. Reoiling is light. Demobilizing and shifting shoreline assets as SCAT's recommend/UCS approve.

Over flights continue. All Clean Seas vessels and the California Responder are secured. All Clean Coastal Waters assets and three VOSS' remain on-scene.

Temporary storage and disposal of cleanup debris is being addressed.

10) Day 4:

Demobilizing and shifting shoreline assets as SCAT's recommend/FOSC approves. SCAT's evaluating reported sheen impacts from El Segundo down to Palos Verdes Point.

All elements of UCS continue applicable efforts.

Three VOSS' secured.

11) Day 5:

Demobilize shoreline assets as SCAT's recommend/FOSC approves.

Ten Fishing Vessels secured.

Clean Waters I secured.

12) Day 6:

Demobilize shoreline assets as SCAT's recommend/FOSC approves. Continuing beach surveys.

All on-water recovery ops secured.

13) Day 7 – Demobilization:

Demobilize staging areas and shoreline ops as areas are cleaned.

**9450.21.5 Major Resource Requirements**
Malibu/Topanga Beaches - 1,000 feet of boom; 1,000 workers.

Santa Monica Beaches/area - 5,000 feet of boom; 1,000 workers.

Offshore/Open-water - 20,000 feet of boom

Seven major OSRVs and boat crews, eleven Navy SUPSALV vessels, and at least two tugs and barges to transfer to.

**9450.21.6 Shortfalls**
1. Quantity and stockpiled dispersant may not be best dispersant for a given product. COREXIT 9527 is currently stockpiled. Availability of other dispersants unknown.

2. Availability of trained local volunteers and workers will be time-dependent. Initially, the number of trained volunteers and workers will be finite. As the spill progresses through time, OSHA training classes can be continuously conducted for arriving, untrained personnel. This scenario has identified a need for 2,000 trained shoreline workers.

3. Non-availability of small workboats and trained operators will limit efforts in the many inaccessible portions affected by this scenario (i.e. Santa Catalina, Palos Verdes Point, San Clemente Island).

4. Potential conflicts between investigative actions and cleanup efforts. For example, any legally imposed requirement associated with NRDA or recovered oil amount and effects may hamper/limit-cleaning operations.

5. Uncertainty as to availability of cascadable equipment due to regulations, permits, and operating limitations of industry in other areas from which the OSRVs are drawn. This scenario presumed the availability of all cascadable 12 major OSRVs.

6. Offshore decontamination of vessels and equipment may be a regulatory issue whereby effective means of removing oil from vessels may be hampered. Vessels required to come into port for cleaning reduce time in active skimming ops, thus reducing further the derated capacity of the skimmers.

7. Deployment of public equipment, i.e. NSF OWOCRs (who/how) needs to be addressed. RP's not required to plan for this in current contingency plans

**9450.21.7 Most Probable Discharge (Los Angeles County)**
The Motor Vessel Slippery Deck is in the process of receiving bunkers (receiving fuel) to its outboard port bunker station from the Tank Barge Floss 101, at Matson Container Terminal at L/A Berth 209. During this time the vessel discovers that approximately 100 gallons of IFO 180 (No.4 fuel oil) has overflowed out of the port fuel tank vents, of which approximately 30 gallons entered the waters of Los Angeles Harbor.

The incident occurs on June 12 at 0600. The winds are out of the NW AT 5-7 kts for the entire model spill.

Affected/potentially affected areas throughout the course of this scenario include: Los Angeles Harbor, Berths 207-209.

The required response action elements are presented in chronological sequence. These include initial actions, spill response organization, containment and cleanup strategies, resource requirement, time necessary for cleanup, and criteria for terminating the event. The following response strategy for this scenario and the estimated times are for planning purposes only and do not reflect performance standards.

1) 01-02 Hours:

CG receives notification from the T/B Floss 101 via CH 16 at 0630, 12 June on behalf of the M/V Slippery Deck. The barge reports its location and situation as per above scenario, states that there has been a bunkering overflow that they have shut down the transfer and that most of the oil is contained under the pier and within the previously deployed precautionary boom. The barge also states that although they are not accepting responsibility for the spill they have dispatched their Barge Tug Big Spool to the scene in order to deploy additional boom to contain the oil.

CG initiated external and internal notifications including CA Office of Emergency Services (OES), CA Dept of Fish and Game (F&G) Los Angeles Fire Boat, Los Angeles Harbor Patrol, SECTOR Investigations Dept.

CG SECTOR LA/LB (pre-designated Federal on Scene Coordinator (FOSC)) initiates pollution investigation efforts. Duty Pollution Investigators dispatched to scene to initiate pollution investigation and confirm cleanup actions needed. ETA for CG representatives is 15 minutes.

SECTOR LA/LB confirms if vessel/barge is of United States or foreign registry. M/V Slippery Deck agent contacted to meet with CG investigators on scene. CG investigators on scene contact SECTOR LA/LB, verify information set forth in scenario and identify spill path and probable RP. M/V Slippery Deck accepts responsibility for the cleanup, initiates vessel's contingency plan and hires Zoom & Boom cleanup contractors for the cleanup effort. SECTOR LA/LB dispatches second team to assist in coordination of cleanup effort/evidence gathering. Resources and estimated response time of hired Cleanup Contractors is as follows:

| | |
|---|---|
| LA Fire Boat | +0.5 hours |
| Spill Container Vessel (Zoom & Boom) | +2.0 hours |
| 75 Contracted Laborers (Zoom & Boom) | +3.0 hours |
| 5 Ton Truck (Zoom &Boom) | +2.0 hours |
| Vacuum Truck(Zoom&Boom) | +3.0 hours |
| 2 Motorized boats(Zoom&Boom) | +0.5 hours |
| Other Equipment(Zoom&Boom) | +3.0 hours |

ACP Comms plan in standby

District Eleven public affairs staff briefed by SECTOR LA/LB in the event of inquiries.

2) 2-3 hours:

SECTOR LA/LB receives report from CG Investigators and F&G on-scene that early preventative booming by barge tug has all of the oil, with the exception of minor sheen, contained and stable beneath LA Berths 207-209 and that there is no substantial threat to wildlife.

RP/CG, with the assistance of local public works officials, verifies that there are no facilities with water intakes in the area.

Evaluation of ship's diagrams, records and logs by CG and RP reveal that the cause of the spill was due to improper valve operations which caused the #3 port fuel tank to overflow aboard the M/V Slippery Deck.

3) 3-4 hours:

Health and safety issues of site safety plan for response personnel, cleanup contractors and community-at-large identified and addressed.

Port notified of cleanup zone, safety zone established necessary, Broadcast Notice to Mariners if necessary.

Response resources arrive on-scene. (# Zoom & Boom spill container vessel, vacuum truck, 5 ton truck, 75 subcontracted laborers, and all other equipment mentioned above as per scenario arrives.)

Cleanup staging operations activated, cleanup activities strategy by RP based on input from CG, F & G, Contractors, and current information. Staging area established pier side LA Berth 211.

4) 4-6 hours:

Cleanup operations commence. Placement of additional hard booming with sorbents to separate affected areas on pier from vessels involved and to minimize sheening. Vacuum truck commences skimming of oil on

surface water beneath affected piers. 75 laborers in punt boats work sorbents, guide vacuum nozzle, and commence pier piling and rock isolation for hand wipe cleanup.

5) 6-12 hours:

Most of the heavy, water-borne oil has been removed. The M/V Slippery Deck and Tank Barge Floss 101 are outside the boom undergoing hull stain and deck cleaning.

6) 12-18 hours:

Waterside cleanup of pier pilings 90% completed and all heavy oil, except for sheen, recovered from water. Tank Barge Floss 101 deemed clean and allowed to depart. Examination of deck indicates that side cleaning of M/V Slippery Deck indicates that additional cleaning is necessary. Hand degreaser is used on ladders, handrails and walkways.

7) 18-24 hours (Day 2):

Final details of cleanup operation continue. Contractor commences removal of solid sorbent waste from water to authorized containers on pier for later transport.

Morning evaluation of cleanup and meeting of CG, RP, F&G, and cleanup contractors conducted on scene. The meeting has determined that only small amounts of light sheen remain in water with all heavy staining removed from adjacent rocks and pier pilings. It was also determined that the M/V Slippery Deck was satisfactorily cleaned and would be allowed to shift berth pending continued investigation and possible civil penalties.

Final determination of meeting members after thorough waterside inspection is that all cleanup efforts can be secured.

### 9450.21.8 Potential Shortfalls

1. Slow on-scene availability and reliability of subcontracted trained labor crews, due to union conflicts.

2. General slow response of contractors to scene for rapid boom deployment as a key issue.

3. Proper nighttime boom monitoring by contractors for tidal changes to often improperly monitored, allowing unidentified amounts of oil to escape.

4. Subcontracted night lighting fixtures often not effective or cost effective for nighttime cleanup. Suspend night cleanup until day if possible.

5. Coordination of pier piling cleanup with low tide accessibility beneath piers, requires high manpower consideration and cost.

6. All deemed completions of cleanups confirmed by thorough waterside inspections beneath piers and consensus of involved parties.

7. All aspects of cleanup operations should be conducted and concluded by all parties involved in a response including federal, state, local agencies; responsible parties; and the contractor.

**9450.21.9 Most Probable Discharge (Orange County)**

The Motor Vessel "No Problema," a private 38-foot pleasure craft is in the process of returning to its private dock in Bayshores, Newport Beach. During this time the owner discovers a small shaft leak with about 15 gallons of diesel fuel and water mixture in his engine compartment. The owner turns on the vessel's overboard discharge pump and retires his vessel to the dock for morning repairs. The next morning the owner's wife discovers the vessel has sank and that a flow of diesel fuel from the vessel's engine room has formed a pool of approximately 5 gallons on the surface of the water.

The incident occurs on August 12 at 1200. The winds are out of the NW at 5-7 kts with daytime temperatures of 80 degrees for the entire model spill.

Affected/potentially affected areas throughout the course of this scenario include Newport Beach Harbor, private boat slip 44.

The required response action elements are presented in chronological sequence. These include initial actions, spill response organization, containment and clean-up strategies, terminating the event. The following response strategy for this scenario and the estimated times are for planning purposes only and do not reflect performance standards.

1) 01-02 hours:

CG receives notification from the Newport Harbor Patrol via landline at 1230, 12 June on behalf of the owner of the sunken vessel Mr. Richard Wealthman. The Harbor Patrol reports the vessel's location and situation as per above scenario, and that about five gallons of diesel which had escaped from the vessel's engine room was contained within a 200 ft boom they had deployed.

CG initiated external and internal notifications including CA Office of Emergency Services (OES), CA Dept of Fish and Game (F&G) Orange County Water Quality.

CG SECTOR LA/LB (pre-designated Federal on Scene Coordinator (FOSC)) initiates pollution investigation efforts. Duty Pollution Investigators dispatched to scene to initiate pollution investigation and confirm clean-up actions needed. ETA for CG representatives is 45 minutes.

SECTOR LA/LB confirms vessel ownership by state boating number. The owner of the sunken vessel Mr. Richard Wealthman is contacted to meet with CG investigators upon arrival on scene.

CG investigators on scene contact SECTOR LA/LB, verify information set forth in scenario, identify spill path, and identify probable RP as Mr. Richard Wealthman. Richard Wealthman accepts responsibility for the incident, and hires Newport Shipyard to salvage the vessel and Zoom & Boom for the clean up. SECTOR LA/LB investigators on scene continue routine evidence gathering and monitoring of situation.

Resources and estimated response time of hired cleanup and salvage contractors is as follows:

Newport Harbor Patrol +0.4 hours

2 Response boats (Zoom & Boom) +2.5 hours

45 ft Salvage vessel (Newport Salvage) +2.5 hours

ACP Comms plan in standby.

District Eleven public affairs staff briefed by SECTOR LA/LB in the event of inquiries.

2) 2-3 hours:

Health and safety issues of site safety plan for response personnel, cleanup contractors and community-at-large identified and addressed by CG and local authorities on-scene.

SECTOR LA/LB receives report from CG Investigators and F&G on scene that early preventative booming by Newport Harbor Patrol has all of the diesel fuel, with the exception of minor sheen, contained within the sunken vessel's slip, that the onboard fuel tank is not leaking and that no additional residual fuel is leaking from the engine compartment. F&G confirms a low threat risk to wildlife.

RP/CG, with the assistance of local public works officials, verifies that there are no water intakes in the area.

Further questioning of RP reveals that the cause of the sinking was due to earlier plugging of the vessel's overboard discharge port for maintenance purposes, which had been forgotten.

Local residences notified of cleanup zone, safety zone established if necessary, Broadcast Notice to Mariners made, if necessary.

3) 3-4 hours:

Response resources arriving on-scene; Zoom & Boom fast response vessels with related recovery and cleanup equipment onboard, Newport Salvage 40 foot salvage vessel with related equipment.

Cleanup and salvage staging operations initiated.

Planning strategy by RP based on input from CG, F&G, Contractors and current information. Staging area established adjacent to sunken vessel slip #44.

Vessel recovery and clean-up operations commence. Placement of additional hard booming with sorbents to separate affected areas from vessels involved and to minimize sheening. Salvage vessel commences lifting of sunken vessel. Clean-up contractor works sorbents, and commences slip cleanup.

4) 4-6 hours:

Most of the heavy waterborne oil has been removed. The M/V "No Problema" has been raised and is undergoing hull stain and deck cleaning.

5) 6-8 hours:

Waterside cleanup 90% completed and all diesel, except for light sheen, recovered from water. M/V "No Problema" deemed clean and stable.

6) 8-10 hours:

Final details of clean-up operation continue. Contractor commences removal of solid sorbent waste from water to authorized containers in response vessels for later transport.

Evaluation of cleanup and meeting of CG, RP, F&G, and cleanup contractors conducted on scene. The meeting has determined that only small amounts of light sheen remain in the water with all heavy staining removed from adjacent areas. It was also determined that the M/V "No Problema" was satisfactorily cleaned and stabilized with all fuel and oils removed. The vessel would be allowed to be taken in tow to repair facility pending continued investigation and possible civil penalties.

Final determination of meeting members after thorough waterside inspection is that all cleanup efforts can be secured.

### 9450.21.10 Potential Shortfalls

1. General slow response of contractors to scene for rapid boom deployment as a key issue.

2. All aspects of cleanup operations should be conducted and concluded by all parties involved in a response including federal, state, local agencies; responsible party; and the contractor.

### 9450.21.11 Potential Resource Shortfall Analysis

Potential resource shortfall analysis, per COMDTNOTE 16471 dated 14 Sep 1991, was undertaken by planning participants to determine improvements needed to enhance preparedness during the first 72 hours of a spill. Two separate approaches were taken in this analysis. First, general shortfall areas were identified which included technology, personnel preparedness, access, etc. Second, evaluations based on spill scenarios were used to assess the adequacy of shoreline resource protection responses. The objective was to evaluate the correlation between availability of protection resources and personnel and the impact of spills. Thus, the analysis included timing issues (i.e. deployment, resource location) as well as actual physical resources.

General Shortfall Categories

The following categories provide convenient categories of the general shortfalls.

### 9450.21.12 Beach Access Shortfalls

Catalina Island has many sites that are only accessible by boat or by repelling down cliff faces. Also, Catalina has limited roads, especially around the coastline. Movement of equipment, supplies and personnel would be very difficult.

A similar situation exists on San Nicholas Island with the exception that there are numerous roads. Both islands have landing strips, although, Catalina's is very limited in the size of planes it can handle.

### 9450.21.13 Technology Shortfalls

Booming and collection technology is insufficient to keep oil from vital (sensitive) areas in strong currents, e.g.. tidal marshes.

No technology exists to exclude oil from the many miles of coastal sand beaches with moderate to high-energy regimes.

Zones, in State waters, have not yet been identified for dispersants "quick approval."

The dispersants stockpiled in this area have little efficacy on the oils most likely to be spilled in this area.

Permitting of in-situ burning is still unresolved.

No fire-boom is available for in-situ burning.

### 9450.21.14 Wildlife Care and Rehabilitation

There are substantial shortfalls for wildlife care and rehabilitation. This is an urgent issue because of level of concern and volatility of public toward this area.

The OSPR Guidance Document "For Oiled Wildlife Care" released in 1993 reported on the existing capabilities of wildlife rehabilitation organizations in California to rescue, transport, clean, treat and rehabilitate oiled marine wildlife. The results were based upon surveys, site visits by OSPR staff, and information provided by the organizations.

In a separate analysis, OSPR used information concerning the numbers of marine wildlife rescued during recent west coast oil spills, the distribution and abundance of California's marine birds and mammals, their vulnerability to oil, and their proximity to areas of special concern for oil spill risk to project probable rehabilitation case loads. The differences between existing capabilities and projected caseloads represent the shortfall in oil spill response capabilities at this time.

California legislation enacted in 1993 would create an oiled wildlife care network by 1997 if funding is forthcoming. At the present time, however, under any spill scenario, existing capabilities fall far short of anticipated wildlife rehabilitation caseloads.

Facilities and shortfalls for the Los Angeles and Orange County Planning areas have been identified as follows:

Los Angeles. Existing emergency capabilities can support care for about 750 birds within 48-72 hours. OSPR has projected rehabilitation caseloads of up to 2000 birds. There is a deficiency of supplies, materials, equipment, and facilities for providing care for about 1250 birds.

Orange County. Existing emergency capabilities can support care for about 25 birds within 48-72 hours. OSPR has projected rehabilitation caseloads of up to 1000 birds. There is currently a deficiency of supplies, materials, equipment, and facilities for providing care for about 975 birds.

It is likely that all facilities in both areas would be mobilized in the event of a spill. The projected joint caseloads would be 3000 with current resources for about 775 cases leaving a shortfall of about 2225 for Los Angeles and Orange County areas combined.

Marine mammal care facilities are available at the Marine Mammal Care Facility at Fort MacArthur. However, seasonally the facility reaches capacity. There are no provisions to care for additional oiled marine mammals.

### 9450.21.15 Personnel Shortfalls

There is no mechanism for maintaining a large cadre of trained cleanup responders. Due to OSHA and other regulations, there is often a lag-time in cleanup response while mandated training is conducted.

The number of field staff in OSPR is minimal relative to the demands inherent to large spills, and quite inadequate in the event of either a SONS spill or two concurrent spills.

The mechanism for incorporating volunteers in evolving very slowly. Dealing with volunteers is sensitive issue similar to that of wildlife care. It is important to develop a plan to give a positive and proactive opportunity to convergent volunteers. Due to extensive training requirements, few of these volunteers can be involved in hands on wildlife work. So, it is important to identify other roles in which they can function and the appropriate training necessary. Supervision and liability issues must also be addressed.

### 9450.3 Pipelines

Shore side facilities account for an increasing number of recent spills. The majority of these have been from pipeline breaks. Typically, these breaks are the result of aging and/or poorly maintained lines and facilities. Better technology is needed to detect potential leaks and to enable quicker shut down of the pipeline when breaks occur.

There is poor contingency (response) planning for inland pipeline spills that may affect marine waters and coastal marshes. Great amounts of time have been spent planning for pollution threats from the ocean-side of marshes. Yet, very little time has been spent planning for shore side oil threats, which are more common then ocean-side threats.

4737 Scenario Driven Shortfall Analysis (Northern Sector)

#### 9450.31.1 Introduction

Requirements to conduct a shortfall analysis are included in the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (Act), and U.S. Coast Guard (USCG) Commandant Note 16471. Under Commandant Note 16471, dated September 30, 1992, the Area Committees were tasked to "...describe shortfalls, including administrative and policy shortfalls..." Section 8670.19 of the Act requires "...a comprehensive review of all oil spill contingency plans for each area to determine if deficiencies exist in equipment, personnel, training, and other areas determined to be necessary to ensure the best achievable protection of the coastline." Given the joint need for this information by both USCG and Dept. of Fish and Game Office of Oil Spill Prevention and Response (OSPR), a decision was made by senior management of both organizations to work together to identify potential shortfalls.

The Shortfall Analysis Subcommittee met on May 13, 1996. Subcommittee members include individuals from USCG, OSPR, County Government, Clean Seas, Marine Spill Response Corporation, oil company representatives, and others. All decisions regarding the scenarios were based on consensus of the Subcommittee. For this year's shortfall analysis the Subcommittee ran two oil spill tabletop scenarios, a most probable scenario in Morro Bay and a reasonable worst case scenario in the Santa Barbara channel. Shoreline protection resources were calculated only for the highest priority environmentally sensitive sites, that is, "A" priority sites in the Area Contingency Plan (ACP). Additionally, response equipment needed for shoreline protection was based upon response strategies published in the ACP.

### 9450.31.2 Summary of Morro Bay Scenario and Trajectory

The most probable discharge scenario was staged in Morro Bay, San Luis Obispo County, and involved a fully loaded (10,000 gallon/approx. 240 barrels) fishing vessel losing power near the entrance into the Morro Bay harbor and alliding with the northern breakwater during late morning, 1000 hours, with average winter weather, at the beginning of a flood tide. The Subcommittee assumed the entire diesel fuel load was spilled (10,000 gallons). We also assumed the vessel owner was not a contingency plan holder. Because of the non-plan holder status, we assumed the USCG would federalize the response, and thus would obtain the necessary funding.

The oil spill trajectory was determined by using local knowledge of average winter currents, winds, and tides for the Morro Bay area. The trajectory for this most probable scenario in Morro Bay, using a 2-knot average current, showed within the first three hours into the incident, oil would spread along a path approximately three nautical miles inside Morro Bay. We calculated after the first three hours, approximately 30 percent of the diesel would have evaporated, leaving approximately 170 barrels (7,140 gallons) in the environment. We determined the remaining 170 barrels would be primarily non-recoverable because it would be mostly sheen at that point and sheen is generally non-recoverable. However, we assumed some sheen recovery using sorbents might be possible.

### 9450.31.3 Shortfall Analysis Results from Morro Bay Scenario

The Subcommittee agreed there would probably be a one-hour lag time after notification of the spill, before USCG and/or OSPR would be on scene to access the situation. Within the first hour USCG Search and Rescue Detachment (SARDET) in Morro Bay would initiate search and rescue. Currently Morro Bay SARDET personnel are not trained in oil spill response. It would then take three to four hours (from initial notification) before USCG from Santa Barbara Marine Safety Detachment would arrive on scene.

The Subcommittee assumed worst case, including the Morro Bay Harbor Department not being able to deploy the 2,000' of global boom that was staged in Morro Bay at the time of the analysis. We assumed the Harbor Department would be preoccupied with the grounded vessel and with search and rescue. Additionally, Sylvester Tug in Morro Bay is available 75% of the time to deploy boom (Sylvester Tug maintains 1,200 feet of harbor boom). However, for this scenario, we assumed worst case that Sylvester Tug was occupied.

The Subcommittee determined that within the first hour of the spill two subsites within Morro Bay (ACP #'s A-4-119.1 cannery natural eddy, and A-4-119.2 Inn at Morro Bay natural eddy would be oiled. It must be noted that all of Morro Bay is an "A" priority site. The first two sites oiled in this scenario, ACP #'s A-4-119.1 and A-4-119.2 are not biologically unique sites within the back bay, but are natural catchment areas. Within 1.5 hours of the spill we determined sites ACP #A-4-119.3, State Park Marina, an economically sensitive site and ACP #A-4-119.4, Morro Bay marsh habitat, would be oiled. Within 2.5 hours of the spill we determined ACP site #A-4-119.5, Chorro Creek inlet would be oiled and by hour 3, Los Osos Creek inlet, ACP site #A-4-119.6 would be oiled.

By hour 4 of the scenario Clean Seas Oil Spill Response Vessel (OSRV) Mr. Clean would arrive along with a trailer of sorbent boom, skiffs, and personnel. Additionally, Clean Seas would notify and contract with the Fisherman's Oil Spill Response Team (FORT). Clean Seas, after initial notification, would make arrangements over the phone so that boom deployment in the back bay could begin as soon as they arrive on scene, four hours after notification.

By hour 5 of the scenario ACP site #'s A-4-199.7, Sweet Springs Marsh and A-4-199.8, Cuesta by the sea inlet, would be impacted. However, Clean Seas would be on scene by hour 4 and would deploy the following response equipment to protect the sites: ACP site #A-4-119.7 requires 50' of harbor boom and 4 people; ACP site #A-4-119.8 requires 200' of sorbent boom and 4 people.

Responders would re-evaluate the situation at the ebb/slack tide (approximately hour 6) to determine if further oiling of ACP site #'s A-4-119.3, A-4-119.4, A-4-119.5, and A-4-119.6 could be prevented as the tide recedes. If further oiling could be prevented, Clean Seas would deploy the following response equipment: ACP site #A-4-119.3 requires 1,200' sorbent boom, 2 skiffs, and 4 people; ACP site #A-4-119.4 requires 5,000' sorbent boom and 4 people; ACP site #'s A-4-119.5 and A-4-119.6 each require 50' sorbent boom and 4 people.

### 9450.31.4 Shortfalls Identified from Morro Bay Scenario

The Subcommittee identified two shortfalls, based on this scenario. Since we assumed the fishing vessel was a non-plan holder, there are no regulatory planning standards to compare to. However, for purposes of conducting this shortfall analysis, the regulatory planning standard for facility transfer areas and the Santa Barbara Channel was used. This regulatory planning standard was used because Morro Bay is near a facility transfer area and because this planning standard is more stringent then the planning standards for regulated vessels. This regulatory planning standard requires a facility to deliver 12,500-barrels/day capacity of spill response equipment to the oil spill within 12 hours of notification. For this scenario, the Subcommittee determined response equipment would be deployed within the 12 hour required time frame, and the regulatory planning standard would be met. However, this scenario showed a 12-hour response time to be inadequate and sensitive resources in the bay would get oiled. Thus, one of the shortfalls identified was dedicated, trained personnel to deploy response equipment within the first two hours of a spill in Morro Bay may not be available, under a worst-case scenario (e.g. when Sylvester Tug, Harbor Department, and USCG Morro Bay SARDET are not available). Clean Seas, the closest dedicated Oil Spill Response Organization, is three hours away.

The second shortfall identified in this scenario was if large numbers of birds become oiled, San Luis Obispo County does not have a designated, permanent washing/rehabilitation facility. Wildlife rehabilitators currently utilize their homes. The local wildlife rehabilitation group Pacific Wildlife Care, member of the Oiled Wildlife Care Network, can currently wash/rehabilitate 25 birds.

### 9450.31.5 Suggestions to Remedy Shortfalls Identified

To remedy the spill response personnel shortfall, OSPR and USCG are currently in the planning stages of training (health and safety and boom deployment training) the USCG Search and Rescue Detachment (SARDET) and the Harbor Department in Morro Bay. Morro Bay SARDET currently has enough personnel to conduct both search and rescue and spill response. Additionally, the USCG recently delivered to Morro Bay a new trailer with 2,000' of new 20' Kepner harbor boom (including hardware e.g. anchors, rope, etc...), 100' of 8" mini boom, sausage sorbent boom, sorbent pads, and personal protective equipment. We are also coordinating with the Morro Bay Task Force, an interagency/community group, in soliciting ideas from this group as to how to alleviate this shortfall.

Regarding the wildlife facility shortfall, the San Luis Obispo/Santa Barbara County areas are slated to be augmented with a centralized wildlife facility in fiscal year 97/98.

### 9450.31.6 Summary of Santa Barbara Channel Scenario and Trajectory

The worst-case discharge scenario was staged in the Santa Barbara shipping channel. The scenario involved a collision between an oil barge and a container vessel transiting approximately 4.5 nautical miles off Santa Cruz Island at night, 2200 hours, in dense fog. The Subcommittee assumed a total release of the barge's cargo, 2,500 barrels of bunker fuel oil. We also assumed the barge was not a plan holder and as such, USCG federalized the spill. The oil spill trajectory was determined by using local knowledge of average spring currents, winds, and tides for the Santa Barbara channel area. Wind out of the southeast and a strong nearshore westward current moved the majority of the oil to the northwest.

The trajectory for day one of the spill showed patches of oil would reach the northeast side of Santa Cruz Island within approximately four hours and would next reach the north side of Anacapa Island. We determined on day one, the majority of the oil would spread north/northeast from Mandalay State Beach area north to the Ventura River. By day two, we determined the oil would continue to move northwest to just northwest of Rincon Point. By day three the oil would continue to move northwest to East Beach area.

### 9450.31.7 Shortfall Analysis Results from Santa Barbara Channel Scenario

By hour 2 of the incident Clean Sweep (Clean Seas' advancing skimmer) and Mr. Clean II [Clean Seas Oil Spill Response Vessel (OSRV)] would be on scene. By hour 5.5, Mr. Clean III OSRV would be on scene and by hour 11 Mr. Clean OSRV would be on scene. These three OSRV vessels maintain a total of 15,000' of ocean boom and have a derated skimming capacity of 35,000 barrels/day. It would be up to the Unified Command to request the use of the non-cascadable OSRV's, the Mr. Clean III and Mr. Clean, which would have to be moved outside their normal risk zones to respond to this spill. Within 2 hours Marine Spill Response Corporation (MSRC) would have OSRV California Responder underway. By hour 3, MSRC California Responder would be on scene with a derated skimming capacity of 10,500 barrels/day with a 4,000-barrel storage capacity. Also at this time MSRC would be mobilizing, from Port Hueneme, 16,500' of ocean boom to be distributed to the VOSS I and II systems and vessels of opportunity as needed. Clean Seas would also supply 27,000' of shoreline boom and MSRC would supply 6,000' of shoreline boom. Additionally, if needed MSRC could have, within 24 hours, an additional 20,000' of shoreline boom, which would be brought from San Diego, Richmond, and Eureka.

By hour 4, the Subcommittee determined patchy amounts of oil would reach the northeast side of Santa Cruz Island, ACP site #A-4-062, and the north side of Anacapa Island, ACP site #A-4-068. The habitat types on these sites are classified as exposed rocky cliffs. On this habitat type, oil is held offshore by waves reflecting off the steep cliffs and the most resistant oil would remain as a patchy band at or above the high tide line. The strategy for these sites is open water containment and recovery.

By hour 20, three sandy beaches, each a "B" priority as far as environmental sensitivity, would be impacted, ACP site #'s B-4-081, B-4-080, and B-4-036 (Mandalay, McGrath, and San Buena Ventura State Beaches respectively). The response strategy for these sites is open water containment and recovery and beach pre-cleaning (removing debris prior to oiling). Since these are "B" priority sites, the needed response equipment is not part of this shortfall analysis calculation. However, the Subcommittee still took these sites into consideration. For beach pre-cleaning, the California Conservation Corps would be contracted with.

By hour 20, oil would reach the Santa Clara River mouth, ACP site #A-4-038. However, by hour 12, a sediment dike would be constructed by a Clean Seas' contractor (such as Clark Engineering Construction, Inc. based in Ventura), to prevent impact. Ventura Harbor, ACP site #A-4-037, would also be impacted within 20 hours but Clean Seas would deploy 1,500' of harbor boom immediately to project the harbor. The Ventura River mouth, ACP site #A-4-035, would also be impacted within 20 hours. This strategy also calls for a sediment dike for protection, which would be constructed by hour 16, by a Clean Seas' contractor.

By the second day, hour 30 into the scenario, oil would reach Rincon Point/Creek, ACP site #A-4-033. Clean Seas would deploy boom across the creek or a Clean Seas' contractor would construct a sediment dike to protect the site. The following "B" priority sites would be impacted this second day, Rincon Point to Pitas Point ACP site #B-4-034, and "wave" area northwest of Rincon Point ACP site #B-4-032. The response strategy for these sites is open water containment and recovery and beach pre-cleaning. As stated above, since these are "B" priority sites the needed response equipment is not part of this shortfall analysis calculation. However, the Subcommittee still took these sites into consideration.

By day three, hour 50 into the scenario, the oil would continue to migrate northwest to Carpinteria State Beach and Creek, ACP site #A-4-031. Offshore containment and recovery and building a sediment dike would be the strategies employed. Carpinteria salt marsh, ACP site #A-4-030, requires a sediment dike to be constructed, as well as secondary protection, lining the entrance of the marsh with 1,000' of harbor boom. Loon Point and Elyse Creek, ACP site #A-4-079; Fernald Point and creeks, ACP site A-4-078; and East Beach area and creeks, ACP site #A-4-027, require offshore containment and recovery, building sandbag dikes, and beach pre-cleaning. Sandyland area, ACP site #B-4-029 was taken into consideration but is not part of this shortfall analysis calculation.

### 9450.31.8 Shortfalls Identified from Santa Barbara Channel Scenario

The Subcommittee identified one shortfall based on this scenario. As with the Morro Bay scenario, Santa Barbara and Ventura Counties do not have a permanent, designated wildlife washing/rehabilitation facility for large numbers of animals. Wildlife rehabilitators currently utilize their homes. Currently the local wildlife rehabilitation group, Santa Barbara Wildlife Care Network, member of the Oiled Wildlife Care Network, can wash/rehabilitate 10 birds.

The regulatory planning standards for vessels operating in facility/transfer areas or the Santa Barbara Channel area requires a vessel to deliver 12,500 barrels/day capacity of spill response equipment to the oil spill within 24 hours of notification. In this scenario this regulatory planning standard was met. However, the Subcommittee did identify the one shortfall discussed above.

Additionally, it should be noted that existing mechanical recovery of oil is often inefficient or ineffective along the open coast in many high energy and most high wind-driven sea states. This leads to the loss of oil to the environment including oiling of beaches if the physical forces acting on the oil bring it toward shore. Equipment and personnel are brought to the incident, but often, some shoreline impact occurs. Thus, we have a technology shortfall. This technology shortfall was not addressed by the Subcommittee this year, but should be discussed in future analyses.

#### 9450.31.9 Suggestions to Remedy Shortfalls Identified from the Santa Barbara Channel Scenario

As stated for the Morro Bay scenario, the San Luis Obispo/Santa Barbara County areas are slated to be augmented with a centralized wildlife facility in fiscal year 97/98.

### 9450.4 Scenario Driven Shortfall Analysis (Southern Sector)

This analysis permits a critical look at response capacity for protection of adjacent resource sites in the face of an expanding oil slick.

Rationale for Spill Scenario Selection

Since no one spill realistically taxes the response capacity along the entire reach, several representative scenarios were selected. The three scenarios included were selected to evaluate response capacity to protect significant resource sites at different locations along the coast. One scenario was selected to evaluate protection responses for each of the following areas: Santa Monica Bay (Malibu Lagoon); L.A.-Long Beach harbor area (Cabrillo wetlands & Anaheim Bay); and Orange County (Anaheim Bay/Bolsa Chica).

A further criterion for scenario selection was proximity to sensitive resources. Spill scenarios with origins near significant ecological resource sites were the best test of response capacity because impacts were more imminent. This criterion influenced the selection of scenarios for Los Angeles-Long Beach area and Orange County.

Spill Scenarios Selected

Scenarios were selected from among the trajectories included in the Clean Coastal Waters' Regional Resource Manual (RRM, section 202). Scenarios were selected to evaluate protection of different sensitive resource sites in the ACP's.

For example, since Anaheim Bay has preeminent ecological value in this region, a scenario was selected from among the three scenarios in the RRM having rapid impacts on Anaheim Bay:

100,000 bbl spill at the eastern end of the Long Beach

breakwater (see CCW RRM, page 202-46)

This scenario (designated Scenario 3, hereafter S-3) was selected in preference to one at the site of the American Trader spill. This scenario permits evaluation of rapid response necessary to deploy protection at Anaheim Bay and Alamitos Bay simultaneously. Thus, it was deemed the more demanding contingency for the Orange County coast.

For the L.A.-Long Beach area, a spill at the mouth of Dominguez Channel was used to evaluate fast response to minimize impacts at Cabrillo Wetlands and inner Cabrillo Beach. A 2000/87,500 bbl spill at mouth of Dominguez Channel L.A. Harbor (see CCW RRM, page 202-28/202-48) was designated Scenario-2 (S-2).For the Santa Monica Bay area, the third scenario in ACP Appendix III was selected: a 3000 bbl North Slope Crude spill at El Segundo marine terminal. A similar scenario in the CCW RRM (pages 202-14,40) for volumes of 2000 and 250,000 bbl was used to compute times of impact at sites in that area. This scenario was selected because of its high likelihood and because it is already specified for Santa Monica in the ACP.

### 9450.41.1 Application of Scenarios to Shortfall Analysis

Once a spill scenario was selected, the zone covered in each 24-hour increment was used to calculate a rate of oil movement per hour. The distance from the spill origin to each site was also measured. From these, the time from spill to impact was calculated. Differences in rates of oil movement up-coast verses down-coast were included. However, if there was any uncertainty about appropriate rates, the fastest rate was used to develop the faster time of projected impact. (It is interesting to note that the projected time and extent of area covered by slicks is not substantially different based on volume included in the scenario; see RRM, section 202.)

Some sites could be impacted by more than one scenario. In that case, both projected impact times were considered in the matrix. This was most evident at Anaheim Bay, where large spills near the Bay require commitment of significantly more resources (e.g. Lori skimmers) to deal with large volumes of convergent oil.

The sites are listed on the matrix. Calculated time of impact is entered for the spill scenario(s), which impact the site. Resource/personnel needs taken from ACP's and RRM were entered in the resources/personnel needed reasonably capable of deployment within the times indicated. A shortfall is identified whenever resources/personnel cannot realistically deploy before the projected time to impact.

Matrix Shortfall Analysis for Spill Scenarios

In general, the shortfall matrix reemphasizes the inadequacy of current booming technology to protect moderate and high-energy shorelines from oiling. For this reason most sites have no protective measures proposed and no site-specific shortfalls. Pre-cleaning and cleanup are the only actions available.

A shortfall was identified at Cabrillo Wetland. Although boom is stationed on site, the best protective response for this site would be a sediment dike. There is no clear mechanism to get equipment to that site nor is there culvert available to construct a sediment dike within the projected four to five hour response frame. Such equipment and material must be pre-identified and arrangements firmed to enable rapid response. Other sites requiring sediment berming are likely to be impacted at sufficiently extended time frames that any number of sources of equipment and material could be mobilized to meet needs.

At Anaheim Bay where large tidal exchanges maximize opportunity for oil entrainment, rapid skimmer deployment on site is a possible shortfall. While deployment of protective boom to this and sites like Cabrillo Beach and Wetlands is feasible within projected time frames, moving skimmers to sites will require additional time. Whenever there is a substantial tidal exchange capable of entraining pooled oil, rapid arrival of skimmers will be essential to effectiveness of booming.

## *9500* List of Agreements

Several other Interagency agreements can be found in Appendix VIII of the REGIONAL CONTINGENCY PLAN.

## 9510 List of Applicable Memorandums of Agreement/Understanding

### 9510.1 MOA on oil pollution and response between Commander, Eleventh Coast Guard District and the State of California—Signed 1997*

MEMORANDUM OF AGREEMENT

ON

OIL POLLUTION PREVENTION AND RESPONSE

BETWEEN

THE COMMANDER, ELEVENTH COAST GUARD DISTRICT

AND

THE-STATE-OF CALIFORNIA

WHEREAS, Congress enacted the Oil Pollution Act of 1990 (OPA 90) to protect the waters of the United States from oil pollution and to plan for the effective and immediate response in the event of an oil spill, and the President subsequently designated the Coast Guard as the Federal On Scene Coordinator (FOSC) within the California coastal zone; and

WHEREAS, Congress has decided in a number of enactments, including OPA 90, not to preempt the various States from regulating certain matters associated with the protection of waters within their jurisdiction from oil pollution, which matters are also subject to regulation by the Coast Guard under OPA 90 and other statutes; an

WHEREAS, Congress explicitly provided that the provisions of OPA 90 do not: (1) preempt or affect the authority of any state to impose additional liability or requirements respecting oil discharges or other oil pollution within such a state or removal activities in connection with such a discharge; (2) affect the authority of any state to establish or continue to fund, any purpose of which, is to pay for oil pollution or the substantial threat of oil pollution costs or damages, or to require any person to contribute to such a fund; or (3) affect the authority of any state to impose any fine or penalty for violation of law relating to a discharge; and

WHEREAS, the State of California has enacted the Lempert Keene-Seastrand Oil Spill Prevention and Response Act of 1990, hereinafter referred to as the California Act, to protect the waters of the State from oil pollution and to plan for the effective and immediate response, removal, abatement, and cleanup in the event of an oil spill and to augment State authority for the prevention and response to spills in waters under the jurisdiction of the State; and

WHEREAS, the California Act provides that the Administrator of the Office of Oil Spill Prevention and Response (OSPR) is appointed by and acts at the direction of the Governor. The Administrator acts as chairperson of the State Interagency Oil Spill Committee (SIOSC) and coordinates actions through the State committee and review subcommittee; and

WHEREAS, the Administrator, subject to the Governor, and through the Department of Fish and Game, has the primary State authority to direct prevention, removal, abatement, response containment and cleanup efforts, with regard to all aspects of any oil spill in the State waters, in accordance with any applicable marine facility or vessel contingency plan, and the State Oil Spill Contingency Plan; and

WHEREAS, the State Lands Commission has the primary State authority to adopt rules, regulation, guidelines and commission leasing policies for reviewing the location, type, character, performance standards, size, and operation of all marine facilities on lands leased from the Commission and all existing and proposed marine terminals within the State; and

WHEREAS, the Commander, Eleventh Coast Guard District is the senior Coast Guard officer within the State of California, exercising Federal authority under the Oil Pollution Act of 1990 and other Federal laws with respect to oil pollution planning and response in waters subject to the jurisdiction of the United States in and outside the State of California and matters dealing with areas of vessel manning and safety equipage; and

WHEREAS, marine oil spills require a rapid, efficient, and coordinated response and cleanup by Federal, State, and local agencies as well as from private entities to minimize the deleterious effects on human, wildlife, and other natural resources; and

WHEREAS, both the Coast Guard and the State recognize the critical roles each has within their respective areas of authority in preventing oil-spills and in planning for and responding to oil spills; and

WHEREAS, the Parties recognize the cooperation between them in the implementation and exercise of their respective statutory and regulatory authority is essential to avoid conflict and unnecessary duplication; and

WHEREAS, the Parties believe and intend that by acting in a cooperative and coordinated manner, the effect will be a synergistically enhanced oil spill prevention and response effort in the State of California;

NOW THEREFORE, the Parties agree, to the extent permitted by law, and as consistent with their respective policies and available resources, to cooperate and to coordinate their efforts in implementing and exercising their respective statutory and regulatory duties related to oil spill prevention and response.

I

PARTIES

The Parties to this Memorandum of Agreement are the Eleventh Coast Guard District ("Coast Guard") and the State of California ("State").

II

PURPOSE OF THE AGREEMENT

The purpose of this Memorandum of Agreement (MOA) is to ensure the Parties exercise their respective authorities regarding oil spill prevention, planning, and response in a manner so as to avoid unnecessary duplication and conflict and to ensure best achievable protection from the impact of pollution incidents for the navigable waters of the United States which are within or may impact the State waters of California; subject to each Party's statutory, regulatory, and policy requirements.

III

DEFINITIONS

Except where otherwise specifically defined in the context of its use herein, or where specifically set forth below, terms used in this Memorandum of Agreement (MOA) shall have the meaning as set forth in Federal law and applicable State law.

A. Specific definitions:

1. State Waters: Federal regulations designate the Coast Guard as the Federal On Scene Coordinator (OSC) within the California coastal zone. The Environmental Protection Agency (EPA) is the OSC for oil spills within the inland zone. The jurisdictional boundary between these zones is specified in the Federal Region IX Regional Response Team Contingency Plan. The term "State waters" shall mean those navigable waters of the United States which lie within the jurisdiction of the State of California and over which the Coast Guard has concurrent Federal authority for oil spill response.

2. Marine Oil Spill Contingency Plan: The Marine Oil Spill Contingency Plan is an addendum to the State Oil Spill Contingency Plan, which in turn is a part of the State Hazardous Materials Incident Contingency Plan. Under this scheme the Department of Fish and Game Director is the State Incident Commander for inland oil spills and the Administrator of OSPR is the State Incident Commander for marine oil spills.

IV

INFORMATION SHARING

The exchange of information between the Federal government and the State relative to historic pollution events and current risks is necessary to develop appropriate prevention and response systems. Both Parties maintain information systems that are relevant to both historical and real-time incidents. The Parties require the fullest degree of information sharing from available and pertinent databases in order to make accurate and timely decisions to prevent and or respond to oil pollution.

Transmissions of information shall be in accordance with procedures adopted by the Parties for that purpose.

A. Action:

1. The Parties agree to share information on Prevention Through People (PTP) programs sponsored by Coast Guard, or other human factor initiatives that either party may undertake.

2. The Eleventh Coast Guard District will advise the State of information it receives of the following events occurring in the navigable waters, or that may impact the State, involving vessel disablings, collisions, groundings, explosions, rammings, allisions, distress and other events when oil pollution or substantial threat of oil pollution results. The State will ensure that its emergency notification systems report these incidents to the Coast Guard.

3. The Parties agree to identify and share existing data bases, including the Marine Safety Information System (MSIS), and work toward developing risk management programs that provide risk data sharing for vessels and access by both parties to all data, subject to the requirements of applicable law, regulation, and policy, in a manner to conserve and leverage agency resources.

4. Initiatives taken to limit the introduction on nonindigenous aquatic nuisance species into State waters will be sought through appropriate State or federal regulation. Information concerning aquatic nuisance species programs shall be shared by the Parties as appropriate.

5. The Parties agree, subject to limitations imposed by applicable law or regulations, to share information from relevant studies.

V

OIL SPILL RESPONSE PREPAREDNESS

The National Contingency Plan (NCP) establishes the response organization within the United States and requires tiered contingency planning efforts. The State, consistent with the NCP, defines its response organization through the State Hazardous Material Plan and addenda to the Oil Spill Contingency Plan.

A. Planning Documents

1. National Oil and Hazardous Substances Pollution Contingency Plan ("National Contingency Plan - NCP"):

The Environmental Protection Agency (EPA) is the lead agency in drafting, and the Coast Guard and EPA are jointly responsible for implementing, the NCP which governs actions concerning spill response and cleanup for Federal, State, local agencies, responsible parties, clean-up contractors and others participating in such actions in United States waters.

a. Action: The State will work with the Coast Guard to ensure State plans and policies for marine environmental protection are consistent with the NCP.

2. State Hazardous Material Incident Contingency Plan and the State Oil Spill Contingency Plan:

The State Office of Emergency Services (OES) is responsible for developing and maintaining the Statewide Contingency Plan that details State responsibilities, policies, and actions governing response to spills in waters of the State. The OSPR has specific statutory authority and responsibility concerning oil spills.

a. Action: The Coast Guard will consult with the State to ensure State plans and policies for marine environmental protection are consistent with the NCP.

3. Area Contingency Plan:

The Area Committees, established by the President under the authority of the Oil Pollution Act of 1990, are responsible for the development of Area Contingency Plans for those Areas under the direction of the Federal On Scene Coordinator (OSC). The Area Contingency Plans describe the responsibilities of owners, operators and Federal, State and local agencies in responding to oil spills or threats of spills, list equipment and personnel available to respond, describe procedures for the use of dispersants and describe how the Area Contingency Plan integrates with other plans. Area Contingency Plans are adopted by amendments to the State Contingency Plan to facilitate and coordinate on-going work with local municipalities and coastal counties. Through the OSPR Local Grant Program, municipal and county governments are also included in State and Federal planning documents. The objective is to create consistency between the local, State, and national contingency plans.

a. Action: The Parties agree to consult with each other to enhance contingency planning and to ensure that the Area Contingency Plans and Statewide Master Plan are consonant and uniform, subject to the requirements of existing law.

4. Facility Oil Spill Response Plans:

Facility Oil Spill Response Plans are required by both Federal and State law. These plans describe facility capabilities to prevent and respond to pollution emergencies. The State and the Coast Guard will coordinate with the Department of Transportation (DOT), Mineral Management Service (MMS), and the Environmental Protection Agency (EPA) in assessing facility contingency plans.

a. Action:

(i) Subject to the requirements of applicable law, regulations and policy, the Parties will develop a system to coordinate, to the extent practicable, the Parties' cooperative review and approval of facility contingency plans. The Parties agree to conduct reviews of facility contingency plans in as much of a coordinated and non-duplicative manner as is permitted by applicable laws, regulations and procedures.

(ii) The Coast Guard and the State will cooperate to ensure that requirements for facility response plans are compatible and do not conflict. The Parties will work together to determine the feasibility of the Coast Guard accepting State review of facility contingency plans, subject to Coast Guard oversight.

5. Vessel Oil Spill Response Plans:

Vessel oil spill response plans are required by both

Federal and State law. These plans describe vessel capabilities to prevent and respond to pollution emergencies.

a. Action:

(i) Although the Parties recognize the need to independently review vessel plans for compliance with their respective laws and regulations, the Parties agree to conduct reviews of vessel contingency plans in as much of a coordinated and non-duplicative manner as permitted by applicable laws, regulations and procedures.

(ii) (ii) The State shall accept to the maximum extent practicable the Federal vessel contingency plan requirements and shall prepare supplementary forms for parties to comply with State requirements in areas such as preventive measures which are in addition to Federal requirements.

(iii) The Parties will cooperate to ensure that requirements for vessel contingency plans are compatible and do not conflict. The Parties will work together to determine the feasibility of the Coast Guard accepting State review of vessel contingency plans, subject to Coast Guard oversight.

B. Government Committees

The National Contingency Plan (NCP) directs the organization of government committees to prevent and respond to pollution emergencies.

1. Regional Response Team:

The Region IX - Regional Response Team (RRT) is

established as a coordinating committee by the NCP and includes the State along with the Federal agencies with pollution prevention and pollution response responsibilities.

a. Action: The Parties agree to jointly participate as members of the Regional Response Team (RRT). RRT participation includes both attending regularly scheduled meetings and responding during incident specific RRT mobilization.

2. Area Committees:

Area Committees were established by OPA 90 to maximize

State and local participation in contingency planning.

a. Action: The Parties agree to coordinate local response planning by jointly participating in the Area Committee planning process. Both Parties are strongly committed to participating in Area Committee Plan development and the use of the Area Committees in conducting exercises and drills, consistent with the provisions of the NCP and applicable State contingency plan.

3. Mexico/United States Pact (MEXUSPAC) Joint Regional Response Team:

The MEXUSPAC Joint Regional Response Team (JRRT) is established in accordance with the NCP to prepare for and respond to pollution emergencies that may impact the international border area between the United States and Mexico on the Pacific coast.

a. Action: The Coast Guard will advise the State of all agreements, plans, and standard operating procedures (SOP) developed to coordinate pollution response with Mexico. During

an incident specific mobilization of the MEXUSPAC JRRT, the State will be represented through the State RRT representative who will be from the Department of Fish and Game.

4. State Interagency Oil Spill Committee (SIOSC): SIOSC is responsible for coordinating oil spill prevention, response, planning and policy at the State level.

a. Action: The Coast Guard is invited to provide input and recommendations to the SIOSC.

5. State Harbor Safety Committees: State Harbor Safety Committees are responsible to evaluate and recommend ways to improve the safety of navigation in harbors and harbor approaches.

a. Action: The Coast Guard is invited to provide input and recommendations to the Harbor Safety Committees.

C. Drills and Exercises:

Drills and exercises are required by both Parties to ensure the readiness and interoperability of pollution response organizations. It is the intention of the Parties to encourage coordination, participation, and cross-training in periodic drills and exercises to facilitate a better understanding of each Party's duties and responsibilities as well as to ensure a combined, effective, familiar working relationship at oil spill incidents.

a. Action:

(i) The Parties agree to interact in the planning, scheduling, design, conduct and evaluation of exercises as time and resources permit. In this context, the Parties recognize the role of the National Strike Force Coordination Center, as the focal point for exercise strategy for all elements of the National Response System, in scheduling, designing, executing, evaluating and providing feedback on all National Response System PREP exercises in conjunction with the appropriate RRT and Area Committees.

(ii) The Parties agree to make available, as time and resources permit, any published annual reports as required by OPA 90 and State statutes concerning evaluations of drills and recommended changes to the National and Area Contingency Plans.

D. Certification of Oil Spill Response Organizations:

Both Parties evaluate, categorize, and certify oil spill response organizations.

1. Action:

a. The Coast Guard and the State will cooperate to the maximum extent practicable to evaluate, categorize, and certify oil spill response organizations. The Parties will develop joint certification guidelines and conduct independent or joint reviews as necessary or desirable.

b. The State shall accept to the maximum extent practicable the Federal compliance documents for Federal certification and shall prepare supplementary forms for compliance with State regulations.

VI

PREVENTION OF OIL SPILLS

A. Cooperative Implementation:

The Parties are coordinating their efforts to prevent oil spills in the marine environment.

1. Action: To the extent permitted under applicable laws, the Parties agree to cooperate in the execution of their respective regulatory responsibilities, to minimize duplication of effort, and to identify opportunities for innovative implementation of casualty prevention plans. Both Parties recognize the importance to encouraging cross training in each other's regulations and rules including the areas of inspection and response. Each Party must exercise its own rulemaking implementation responsibilities independently and in accordance with applicable rulemaking procedures. Federal inspection requirements associated with vessel safety are not subject to supplemental State regulation.

B. Vessel Inspections:

Each Party recognizes that the other must independently exercise its respective examination responsibilities in accordance with applicable law, regulations and policies. The Coast Guard conducts inspection programs for the purpose of enforcing both international agreements and domestic law aboard United States and foreign flagged vessels. The State, under the California Act, is required to evaluate that inspection process and make recommendations for improvement.

1. Action:

a. The Parties agree to work together to avoid inconsistent requirements and to find ways to conduct vessel inspections in such a way that disruption to the industry is minimized and efficiency and safety maximized.

b. In implementing any State examination programs, the State agrees to avoid conflicts and unnecessary duplication in reviewing Federal inspection programs by on-going consultation with the Coast Guard.

c. Review of inspection records: The Parties agree to make inspection records available to the other and to cooperatively review inspection results, subject to applicable laws, regulations, and procedures.

d. The State shall report to the responsible officer in charge, marine inspection (OCMI), recognized discrepancies in meeting the requirements of international agreements believed to exist aboard United States and foreign flagged vessels.

e. Requirements in State Waters: The Parties will cooperate to establish consistent pollution prevention requirements, and to cooperatively monitor, examine and exchange information relative to those requirements, for vessels to operate in State waters.

f. The State will promptly inform the cognizant OCMI, and the Coast Guard will promptly inform the Administrator or his designee, of any situation or circumstance relative to a vessel whose condition or equipment may significantly increase the potential for an unauthorized discharge or create an unusual or an unacceptable risk to public health and safety or the safety of navigation within State waters.

g. The Parties agree to share all applicable information obtained from their respective vessel inspections and examinations.

C. Vessel Screening:

The Coast Guard, under Federal law, through the District Commander and the Captain of the Port (COTP), has the authority to regulate the entry of vessels, including those determined to be a threat to the environment. The State may establish the means by which it can determine whether tank vessels entering the State waters pose a substantial risk of harm to public health and safety and the environment.

1. Action: When the State determines that a particular vessel or vessels pose a substantial risk, that determination will be forwarded to the cognizant Captain of the Port (COTP). The COTP shall consider that information in making a determination under Federal law as to appropriate action to be taken, if any, including the possibility of denial of entry.

D. Tank Vessel Equipment:

The Coast Guard conducts inspections and examinations to ensure compliance with requirements for equipment to ensure safety of life at sea aboard vessels. The California Act authorizes the Administrator to conduct vessel inspections. Both Parties conduct examinations to ensure compliance with requirements for pollution prevention and pollution response equipment.

1. Action: The Parties will cooperatively examine pollution prevention and pollution response equipment aboard vessels and report noncompliance to the other Party.

E. Tank Vessel Manning:

The Coast Guard establishes and enforces requirements for manning, competence, and documentation of personnel aboard tank vessels.

1. Action:

a. The State will assist the Coast Guard to evaluate and coordinate additional requirements for manning, training, and qualification requirements through the manning standards process.

b. The Parties agree to actively promote and coordinate research projects, such as PTP, to identify human factors, which need to be regulated to prevent pollution incidents.

F. Tank Vessel Transfer Operations:

Monitoring tank vessel transfer operations has been identified as an effective pollution prevention action.

1. Action:

a. The Parties will cooperate to monitor transfer operations aboard tank vessels, including, but not limited to, dockside transfers at facilities and lightering and bunkering operations. The Coast Guard acting through the Sectors and the State agree to cooperate in the scheduling of monitoring vessel transfer operations to make best use of limited resources and avoid redundant oversight and disruptions to industry. Each Party will advise the other of violations observed.

b. The Parties will cooperatively monitor and examine pollution prevention and pollution response equipment during transfer operations. Each Party will advise the other of violations observed.

c. The Parties agree to make transfer monitor records available to each other and to cooperatively review monitoring results, subject to applicable laws, regulations and procedures.

G. MARPOL 73/78

MARPOL 73/78 is the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto:

MARPOL 73/78 is an international agreement implemented to reduce pollution from vessels.

1. Action: The Parties will cooperate in the enforcement of existing MARPOL requirements. The Coast Guard will keep the State informed concerning MARPOL regulations, and both Parties will work together to develop disposal services adequate to support port operations.

H. Facility Inspections:

Facility inspections are conducted by both Parties to ensure compliance with pollution prevention and pollution response regulations. The State has statutory responsibility for oil transfer facilities and their operation within the State. Included in this responsibility is the requirement to establish regulation and inspection programs governing oil transfer facilities. This includes regulation and inspection of oil transfer operations between marine facilities and tank vessels.

1. Action:

a. Facility Inspection: The Parties will coordinate their respective inspection and monitoring activities to the extent practicable to utilize the resources of both Parties efficiently and effectively. Cognizant inspectors from both Parties may carry out inspections and other activities jointly where appropriate.

Equipment: The Parties will cooperatively enforce requirements for pollution

prevention and pollution response equipment at marine facilities.

Manning: The Parties will cooperatively enforce requirements for trained and

qualified personnel to be responsible for transfer operations at marine facilities.

d. MARPOL Reception Facilities: The Parties will work together to ensure adequate facilities are present to receive garbage, sewage, and oily wastes from vessels.

e. The State will promptly inform the COTP, and the USCG will promptly inform the State, of any situation or circumstance relative to facilities whose operation or equipment may significantly increase the potential for an unauthorized discharge or create an unusual or an unacceptable risk to public health and safety, or the safety of navigation within State waters.

I. Waterways Management:

1. Port and Waterways Safety

The Captain of the Port (COTP) is the pre-designated Federal official with primary responsibility to exercise control of vessels to ensure the safety and security of ports and waterways. Under the California Act, Harbor Safety Committees are created and are responsible for the planning of safe navigation and operation of tankers, barges, and other vessels in harbors and harbor approaches.

a. Action

(i) The State will promptly inform the COTP, and the Coast Guard will promptly inform the appropriate State authority, of any situation or circumstance relative to vessels whose operation or equipment may significantly increase the potential for an unauthorized discharge or create an unusual or an unacceptable risk to public health and safety, or the safety of navigation within State waters.

(ii) The State is guided by recommendations from the Harbor Safety Committee for the planning of safe navigation and operation of tankers, barges and other vessels within each harbor. The State, in adopting regulations to implement the Harbor Safety Plan will coordinate with the COTP.

2. Vessel Traffic Services (VTS)

The Ports and Waterways Safety Act authorizes the Coast

Guard to construct, operate and maintain vessel traffic services in the areas subject to the jurisdiction of the United States. The Federal system of VTS is designed and empowered to inform, advise, and direct marine traffic in designated areas. Federal VTS require the participation of certain classes of vessels and may direct the movement of those vessels to reduce navigational risks.

In 1991, the Coast Guard completed a VTS Ports Needs Study to determine which United States ports would gain the most benefit from the presence of a Federal VTS. The California ports and waterways included in the Port Needs Study were Los Angeles/Long Beach, Santa Barbara Channel and the ports in and around San Francisco Bay.

a. Action:

(i) The Coast Guard maintains a Federal VTS in San Francisco Bay. The State will cooperate with the Coast Guard to ensure expansion of the existing VTS system within San Francisco, San Pablo, Suisun Bays as well as the Gulf of the Farallones.

(ii) A Vessel Traffic Service (VTS) for Los Angeles/Long Beach is maintained under a joint partnership between the Marine Exchange, the State and the Coast Guard.

3. Pilots

Federal law requires pilots aboard vessels sailing within the coastwise trade. Foreign vessels or United States vessels engaged in foreign trade may be controlled by State pilotage requirements. In the absence of State pilotage regulations, the Federal government may impose pilotage requirements on those vessels.

a. Action: The Coast Guard and the State intend to enter into a memorandum of agreement with California's port and harbor authorities for the purpose of creating a state pilotage system ; except for the port and harbor authorities falling under pilotage jurisdiction of the Board of Pilot Commissioners for San Francisco, San Pablo and Suisun Bays, where the Coast Guard recognizes the State regulation of pilotage.

4. Tug Escorts

Federal and State law authorize the regulation of the

use of tug escorts and may require either equipment or standards of performance deemed necessary for the function.

a. Action:

(i) The State and the Coast Guard agree to consult with each other in issuing any regulations requiring tug escorts to ensure that they are consistent to the extent permitted by law.

(ii) Towing Equipment: The Parties agree to review requirements for tow equipment for barges and tank vessels carrying oil in bulk, with the purpose of determining whether additional standards for equipment, maintenance, operation, and inspection should be adopted.

5. Aids to Navigation (ATON)

The Coast Guard establishes, regulates, and maintains a uniform system of aids to

navigation within the United States.

Action: The State will assist the Coast Guard by recommending changes,

improvements, or repairs that may improve aids to navigation, in cooperation with the Harbor Safety Committees.

J. Public Information/Education

The Parties agree that public education in areas of pollution prevention, which includes oil, hazardous substances and garbage, is a high priority and that each agency shall seek opportunities to coordinate pollution prevention public awareness and education programs.

1. Action:

a. Marinas: Public information and education will be cooperatively developed and implemented targeting marina operations to reduce pollution from oil, toxic substances, garbage, and sewage.

b. Small Oil Transfer Facilities: Public information and education will be cooperatively developed and implemented targeting small oil transfer facilities to reduce pollution from oil, toxic substances, garbage, and sewage.

c. Recreational Vessels: Public information and education will be cooperatively developed and implemented targeting the recreational boating community to reduce pollution from oil, toxic substances, garbage, and sewage.

VII

RESPONSE

Federal law established the Coast Guard as the primary Federal agency tasked with responding to oil spills on the navigable waters of the United States. In such cases, the Federal On Scene Coordinator (OSC) is the pre-designated official responsible for directing response actions. The OSC may direct or monitor all Federal, State, and private actions in response to an oil spill or a potential oil spill in State waters. The Parties will respond to marine oil spills as required by and in accordance with the National Contingency Plan (NCP). The OSC will consult, as required by OPA 90 and other applicable Federal law, with the OSPR Administrator or designee concerning oil spill response activities. State law provides that OSPR is responsible for coordinating State oil spill cleanup efforts.

A. Notification: The Parties agree to provide the earliest possible notification of discharges of oil and hazardous substances and imminent threats of such discharges to each other in accordance with applicable law, regulations and policies consistent with the National Oil and Hazardous Substances Pollution Contingency Plan and applicable area contingency plans. In order to provide a single point of contact for the OSC in the event of a marine oil spill, the OSPR Administrator or designee will represent all State agencies and will be the primary point of contact.

B. Incident Command System (ICS)/Unified Command Structures (UCS):

The Incident Command System (ICS)/Unified Command Structure (UCS) establishes functional responsibilities, lines of communication, information sharing and control for the conduct of an oil spill response operation.

1. Action:

a. The Parties agree to work together within the framework of their respective authorities to ensure a coordinated effort with a minimum of duplication in response to oil spills.

b. The Parties agree to implement an ICS/UCS to ensure coordination of emergency response decision-making during a pollution incident. In those circumstances where governmental action is required to develop and direct action to clean up or abate the effects of an oil spill, the Parties agree to consider best utilization of existing resources, avoiding duplication, while taking advantage of resource availability. The OSC may request the State to undertake response actions on a case-by-case basis. If the State assumes responsibility for response activity, the State will conduct those activities, as directed by the OSC, in accordance with the National Contingency and Area Contingency Plans.

c. Response Decisions: The OSC will coordinate with the State in decision-making relating to the conduct of oil spill response operations including, but not limited to: salvage, lightering, safe haven and other matters affecting the discharge of spilled oil, its containment or its cleanup.

d. The Parties agree to establish a joint public information center to provide for the coordinated dissemination of information during a response operation. This provision does not preclude the Parties from making independent responses to the media and the public.

C. Natural Resource Protection

Both Parties recognize the importance of protecting and preserving natural resources in responding to an oil spill. Both Parties agree that response strategies and procedures will be established through the Unified Command Structure (UCS), in accordance with applicable laws, regulations, and policies, and procedures. The Area Contingency Plan (ACP) will be used as the primary guidance document regarding resource protection.

D. Response Monitoring and Technology

Both Parties agree that the methods used to clean up oil and oily debris shall be established through the Incident Command System (ICS)/UCS which will determine the level of action which is required.

1. Action:

a. Both Parties agree, through the Incident Command System, to provide timely input and recommendations to the Unified Command, to the extent practicable, on dispersant usage, in situ burning, bioremediation, and other non-mechanical cleanup technologies.

b. Both Parties agree that decisions to discontinue clean up operations and demobilize response activities shall be made through the Unified Command Structure. The State retains the right to undertake response, remedial or mitigating actions beyond the response actions completed by the OSC.

E. Incident Command System (ICS) Training

Both Parties acknowledge the necessity for increased and ongoing training in ICS procedures to maintain a qualified pool of response personnel.

1. Action:

a. Both Parties agree to establish training criteria appropriate to their agencies.

b. Both Parties agree to pursue joint training opportunities and instruction.

c. To better prepare for an oil spill where a responsible party is not present or not identified, the State and each COTP shall prepare an action plan for, and exercise the Incident Command System. Such action plans shall be reviewed, updated, and exercised as needed.

VIII

NATIONAL POLLUTION FUNDS CENTER INFORMATION

A. The Oil Spill Liability Trust Fund (The Fund).

The Fund provides funding under certain conditions for oil discharge removal actions. The Fund is available in certain circumstances to compensate the State for incurred costs and damages associated with oil discharges. To the extent allowed, a State may access the Fund under current regulations and National Pollution Fund Center (NPFC) procedures.

1. Action: Upon the publication of regulations implementing Section 1012(d)(2) of OPA 90, the State may negotiate directly with the NPFC to establish a cooperative agreement to provide access to the Fund under Section 1012(d)(2). Any agreement between the State of California and the National Pollution Fund Center shall be attached as an annex to this MOA.

B. The National Pollution Fund Center (NPFC)

1. The NPFC administers the Oil Spill Liability Trust Fund (The Fund) in order to: provide funding for oil removal activities, provide State access to the Fund, conduct cost recovery, accept and process claims, and evaluate requests by Federal trustees to fund initiation of natural resource damage assessments. The NPFC also administers Certificates of Financial Responsibility and provides CERCLA/Superfund funding to Coast Guard On Scene Coordinators (OSC) responding to hazardous material incidents.

2. The State may receive payment from the Fund in the State's role as a response organization engaged in removal activities consistent with the National Contingency Plan, as an appropriate claimant for damages, and in the State's role as a natural resource trustee. In addition to the text herewith concerning Section 1012(d)(2) of the Oil Pollution Act of 1990 (OPA 90), the State recognizes the following provisions outline alternative funding methods for State removal activity:

a. Section 1012(d)(1). Regulations under Section 1012(d)(1) of OPA 90 allow the NPFC, upon request of the Governor of a State and as authorized by the Federal On Scene Coordinator (OSC), to obligate The Fund for payment in an amount not to exceed $250,000 for removal costs, consistent with the National Contingency Plan (NCP), required for the immediate removal of a discharge, or the mitigation or prevention of a substantial threat of a discharge, of oil. The NPFC's Technical Operating Procedures (TOPS) for State access under Section 1012(d)(1) of OPA 90, and the TOPS for resource documentation under OPA 90 are approved guidelines for State use to access the Fund under this section.

b. Claims. Regulations under Section 1012(a)(4) of OPA 90 authorize use of The Fund for the "payment of claims in accordance with Section 1013 of OPA 90 for uncompensated removal costs determined by the President [Coast Guard] to be consistent with the NCP or [for] uncompensated damages." Procedures for claims are found in 33 CFR Part 136. States have a special status under Section 1013 of OPA 90 regarding claims for uncompensated costs, which allows States to make such claims directly to The Fund rather than first to the responsible party.

c. The State agrees to eliminate excessive overhead expenses associated with the cost recovery program so that only those individual claims in excess of a dollar amount to be determined through consultation with the Coast Guard and eligible for compensation shall be submitted to the Fund.

d. Working Directly for the OSC. State agencies may work directly for the On Scene Coordinator (OSC) in performing removal actions. In these situations, the OSC issues a Pollution Removal Funding Authorization (PRFA) to the State to establish a contractual relationship and to obligate The Fund. The OSC actively directs and is responsible for the response actions. The OSC may request State assistance and participation in emergency removal actions under CERCLA in response to a hazardous materials incident or threatened incident and where funding for these actions is established in a PRFA.

3. Natural Resource Damage Assessments. A State natural resource Trustee may request access to the Fund for the initiation of an assessment of natural resource damages resulting from a discharge of oil, through a Federal Lead Administrative Trustee (one of the Federal Trustees designated in the NCP), in accordance with the procedures established by the NPFC (Section 6002(b) of OPA 90).

IX

ENFORCEMENT

Enforcement action by either Party may include civil and criminal penalties. The Coast Guard may also take action against Coast Guard merchant marine licenses and seamen's documents.

A. Action:

1. Subject to the requirements and limitations of applicable State and Federal law, the Parties agree to cooperate to the fullest extent possible in marine casualty investigations and pollution investigations including, but not limited to: the sharing of information regarding witnesses, reports, analyses, and other available information, or evidence that may assist in determining the cause of the casualty or pollution incident.

2. Enforcement action undertaken by each of the Parties must occur independently in accordance with applicable laws and regulations. The Parties agree that to the extent they can, they will consult with each other as to intended enforcement action.

3. The Parties agree to investigate the feasibility of the Coast Guard utilizing the Department of Fish and Game Petroleum Chemistry Laboratory for the analysis of Coast Guard oil samples.

X

RULEMAKING

A. Issuance of Regulations

The Oil Pollution Act of 1990 and other-Federal law provides for the issuance of regulations pertaining to the prevention of oil spills from vessels. The Commandant of the Coast Guard has the authority to promulgate such regulations. The Commander, Eleventh Coast Guard District, and the respective Captains of the Port have limited authority to promulgate local regulations. Acting under its inherent regulatory authority and under authority not preempted by Federal law, the State has the authority to promulgate regulations concerning oil spill prevention, which do not conflict with, and which are not otherwise preempted, by Federal law. It is the intention of the parties to maintain close communications to reduce conflict between each Party's permits, directives, and instructions.

1. Action:

a. The intent of this section is to avoid conflict and inconsistent regulation in rulemaking wherever possible, subject to applicable procedural rules, and to endeavor to provide a coordinated, synergistic response to oil pollution planning and response. It is the intent of the Parties to endeavor under their respective authorities to assure the best achievable protection for the waters of the State.

b. In addition, the respective Federal and State procedures for noticing the opportunity to comment on proposed rules, the Parties anticipate that through their participation on committees and day-to-day working communications, the concerns of each will be discussed and given due consideration.

B. Containment and cleanup for refueling, bunkering or lightering operations

OPA 90 and other Federal laws regulate refueling, bunkering and lightering operations. Federal regulations enforced by the Coast Guard govern these operations. Subject to the requirement that they be consistent with Federal regulations, the State may issue its own regulations relating to these same operations.

C. Tank Vessel Response Equipment Rules

Federal law governs the standards for response equipment. State law authorizes the adoption of State standards for spill response equipment to be maintained on tank vessels operating in waters of the State. State rules must be consistent with Federal spill response equipment standards.

XI

AGREEMENT

A. This agreement represents a voluntary understanding between the Eleventh Coast Guard District and the State of California.

B. The terms of this agreement may be changed at any time by the Parties by a written, signed amendment hereto with or without notice to any other person.

C. The agreement may be terminated by either party at any time without notice to any person other than the other party.

D. No rights, duties, obligations, or liabilities enforceable at law are created by this agreement.

E. No action based upon this agreement may be brought against the United States or the State of California by any person.

F. This agreement does not alter, modify, abridge, or in any way affect any rights, duties, obligations, or liabilities of any person under the laws of the United States or the State of California.

G. In the event that individual and several portions of this agreement are found to be in conflict with either State or Federal law, regulations or policies, and therefore of no effect, the agreement will remain in effect without those provisions, unless either Party notifies the other in writing that the entire agreement is terminated.

H. Any action to modify, amend or terminate this agreement may only be taken by the Governor of the State of California or the Commander, Eleventh Coast Guard District or person to who this authority is specifically delegated by them.

I. This MOA supersedes and replaces the MOA signed on June 2, 1993.

FOR THE STATE OF CALIFORNIA: FOR THE UNITED STATES COAST GUARD:

PETE WILSON
Governor
State of California

Date:

R. T. RUFE
Vice Admiral, USCG
Commander,
Eleventh Coast Guard District

Date:

## 9510.2 MOA between Department of Fish and Game's Office of Oil Spill Prevention and Response and the State Water Resources Control Board relating to discharges associated with response activities conducted pursuant to CH. 7.4, Division 1 of the Government Code.*

MEMORANDUM OF UNDERSTANDING

BETWEEN THE

DEPARTMENT OF FISH AND GAME'S

OFFICE OF OIL SPILL PREVENTION AND RESPONSE

AND THE

STATE WATER RESOURCES CONTROL BOARD

RELATING TO

DISCHARGES ASSOCIATED WITH RESPONSE ACTIVITIES

CONDUCTED PURSUANT TO CH. 7.4, DIVISION 1

OF THE GOVERNMENT CODE

WHEREAS, The Administrator; of the Office of Oil Spill Prevention and Response (hereinafter referred to as OSPR) and the Executive Director of the State Water Resources Control Board (hereinafter referred to as SWRCB), acting for the SWRCB and the Regional Water Quality Control Boards (RWQCBs), are directed by Government Code section 8670.7, as amended by Stats. 1993, ch. 736, to enter into a memorandum of understanding (MOU) to address discharges, other than dispersants, that are incidental to, or directly associated with, the response, containment, and clean up of an existing or threatened oil spill in marine waters, conducted pursuant to Chapter 7.4, Division 1 of the Government Code; and WHEREAS, It is the intent of this MOU that all incidental discharges as defined herein shall occur within the response area in or proximate to the area in which the oil recovery activities are taking place for the purpose of returning any oily water back into the response area; and

WHEREAS, Both the Administrator of OSPR and the SWRCB share the same goal of minimizing any unnecessary deleterious impacts to the environment, or to the public health and safety; and

WHEREAS, The Administrator of OSPR has the primary authority to direct prevention, removal, abatement, response, containment, and cleanup efforts with regard to all aspects of any oil spill in or threatening the marine waters of the State; and

WHEREAS, The SWRCB and the RWQCBs have the primary authority for regulating and ensuring the quality of the waters of the State; and

WHEREAS, This MOU is not effective until approved by the SWRCB and the Administrator of OSPR; and

NOW, THEREFORE, the Administrator of OSPR and the Executive Director of SWRCB (the Parties) have reached the following agreement and clarification of existing law concerning discharges, other than dispersants, that are incidental to, or directly associated with, the response, containment, and clean of an oil spill in marine waters, pursuant to Chapter 7.4, Division 1 of the Government Code.

Definitions

The Parties agree that for the purposes of this MOU the following definitions shall apply:

a. Incident Command System or Unified Command Structure:

For the purpose of this section the terms “Incident Command System or Unified Command Structure” mean the procedures established for directing personnel, facilities, equipment, and communications during the response, containment, and cleanup of an oil spill incident in marine waters.

b. Incidental Discharge

“Incidental discharge” means the release of oil and/or oily water within the response area in or proximate to the area in which the oil recovery activities are taking place during and attendant to oil spill response activities. Incidental discharges include, but are not limited to, the decanting of oily water; in order to conserve oil storage capacity, and the wash down of vessels, facilities, and equipment used in the response

c. Marine Waters:

“Marine waters” include all waters defined as marine waters in California Government Code Section 8670.3(h) and all water otherwise within the jurisdiction of the Administrator of OSPR. under Chapter 7.4, Division 1 of the Government Code.

d. National Pollution Discharge Elimination System Permit (NPDES Permit):

An NPDES Permit is any permit issued by the SWRCB or the RWQCBs pursuant to California Water Code section 13370 et seq., as required or authorized by the Federal Clean water Act, Title 33 U.S.C. 1251 et seq.

e. Oily water:

Oily Water means any substance, matter, or medium containing or permeated with any kind of petroleum, liquid hydrocarbons, or petroleum products or any fraction or residues there from, including, but not limited to, crude oil, bunker fuel, gasoline, diesel fuel, aviation fuel, oil sludge, oil refuse, oil mixed with waste, and liquid distillates from unprocessed natural gas. Waste includes, but is not limited to, seaweed, driftwood, debris, and other similar types of materials.

f. Response:

Response means the time period when response personnel, acting under the authority of the Administrator, the Federal On-Scene Coordinator, the State On-Scene Coordinator, through the Incident Command System or Unified Command Structure, are performing Response Activities that are reasonably necessary to prevent, reduce, or mitigate damages to persons, property, and/or natural resources of this State due to an oil spill incident in marine waters.

g. Response Activities:

Response Activities means those activities, consistent with the National Contingency Plan, the State Oil Spill Contingency Plan, or taken at the direction of the Administrator or Federal On-Scene Coordinator through the Incident Command System or Unified Command Structure, in response to a spill, that entail the removal of oil from marine waters of the State. This includes all activities conducted on-water or onshore relating to the separation, recovery, containment, transfers, or treatment of marine waters of the State contaminated by oil and/or oily materials.

h. Response Area:

Response Area means the area of marine waters where response activities are occurring as defined by the daily work plan approved under the Incident Command System or Unified Command Structure by the Administrator, Federal On-Scene Coordinator, or State On-Scene Coordinator.

i. Waste Discharge Requirements

“Waste Discharge Requirements” are a set of requirements issued by the RWQCBs, pursuant to California water Code section 13260 et seq., regulating the discharge of waste, which could affect state waters. Waste Discharge Requirements may be issued by the SWRCB upon the review of an action or failure to act by a RWQCB, pursuant to Water Code section 13320.

II. NPDES Permits

The Parties agree that:

The incidental discharges covered by this MOU are consistent with the State Contingency Plan and the National Contingency Plan. Incidental discharges as described in this MOU which are in compliance with the instructions of the On-Scene Coordinator, pursuant to the National Contingency Plan or the applicable Coast Guard regulations, are excluded from regulation under an NPDES permit, as provided by the Federal Environmental Protection Agency regulation 40 C.F.R. 122.3(d), are consistent with Federal laws and regulations, and do not constitute a prohibited discharge.

III. Waste Discharge Requirements

The Parties agree that:

a. It is in the public interest for the RWQCBs for the North Coast, San Francisco Bay, Central Coast, Los Angeles, Santa Ana and San Diego Regions to waive the issuance of waste discharge requirements for incidental discharges, within the response area during a spill response as provided in Water Code section 13269. The SWRCB will recommend such action to the RWQCBs.

b. Such discharges do not create a vested right to discharge, but rather such discharges are privileges, as provided by California Water Code section 13263(g).

IV. Miscellaneous

a. The terms of this agreement may be changed at any time by the Parties by a written, signed amendment hereto with or without notice to any other person.

b. The agreement may be terminated by either party at any time without notice to any person other than the other party.

c. No rights, duties, obligations, or liabilities enforce able at law are created by this agreement.

d. This agreement does not alter, modify, abridge, or in any way affect any rights, duties, obligations, or liabilities of any person under the laws of the State of California.

e. In the event that individual and several portions of this agreement are found to be in conflict with either state or federal law, regulations or policies, and, therefore, of no effect, the agreement will remain in effect without those provisions unless either party notifies the other in writing that the entire agreement is terminated..

f. Any action to modify, amend, or terminate this agreement may only be taken by the Administrator of OSPR and the Executive Director of SWRCB, or persons to whom this authority is specifically delegated by them. Any such modification is not effective until approved by the SWRCB.

| | |
|---|---|
| FOR THE OFFICE OF OIL SPILL PREVENTION AND RESPONSE: | FOR THE STATE WATER RESOURCES CONTROL BOARD: |
| Pete Bontadelli | Walt Pettit |
| Administrator | Executive Director |
| Date: Date: | |

## 9510.3 Memorandum Of Understanding relating to the handling and transport of materials used or recovered during an oil spill between the Department Of Fish And Game's Office Of Oil Spill Prevention and Response and The Department Of Toxic Substances Control. 1997*

State of California

M e m o r a n d u m

To : Ben D. Kor, NCRWQCB Date: APR 28 1995

Steven R. Ritchie, SFBRWQCB

Roger Briggs, CCRWQCB

Robert P. Ghirelli, LARWQCB

Gerard J. Thibeault, SARWQCB

Arthur L. Coe, SDRWQCB

Walt Pettit

Executive Director

From : STATE WATER RESOURCES CONTROL BOARD

901 P Street, Sacramento. CA 95814 Mail Code G-8

Subject: WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR INCIDENTAL DISCHARGES ASSOCIATED WITH OIL SPILL RESPONSE ACTIVITIES

In 1993 the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act was amended to require that the Administrator of the Office of Oil Spill Prevention and Response (OSPR) and the Executive Director of the State Water Re-sources Control Board (SWRCB) enter into a memorandum of understanding (MOU), which addresses all permits and other requirements pertaining to the incidental discharge of wastewater during oil spill response activities. An MOU was subsequently signed in 1995. A copy is attached for your reference as Attachment l.

The MOU addresses discharges of oily water which occur during oil spill response activities within or proximate to oil spill response areas. The MOU finds that these discharges are exempt from regulation under a National Pollutant Discharge Elimination System (NPDES) permit. The MOU also provides that the SWRCB will recommend that the coastal Regional Water Quality Control Boards (RWQCBs) waive the issuance of waste discharge requirements for these types of discharges.

The purpose of this memorandum is to request that you take appropriate action to amend the waiver resolution or water quality control plan, as appropriate, for your region to include incidental discharges on the list of discharges for which waste discharge requirements are waived. Waiver of this type of discharge would be in the public interest, as provided' in Water Code section 13269, because the issuance of waste discharge requirements under the circumstances could significantly impede oil spill cleanup. Also, the addition of incidental discharges to an RWQCB's waiver list could be considered categorically exempt from the California Executive Officers.

Environmental Quality Act, Public Resources Code section 21000, et seq. under the emergency project exemption. See 14 C.C.R. § 15269. The addition of incidental discharges to an RWQCB's waiver list would also be exempt from review by the Office of Administrative Law under the Administrative Procedure Act, Government Code section 11340, et seq. See Gov. Code § 11352(b).

Sample language for inclusion in the RWQCB's waiver resolution is contained in Attachment 2. Please contact Sheila Vassey, Senior Staff Counsel, in the Office of the Chief Counsel at (916) 657-2408 or Calnet 8-437-2408 if you would like further information regarding this matter.

Attachments (2)

cc: Pete Bontadelli Administrator Office of Oil Spill Prevention and Response Department of Fish and Game

1700 K Street, Suite 250 Sacramento, CA 95814

Barry R. Ogilby Carlsmith, Ball, Wichman, Murray, Case & Ichiki

555 South Flower Street, 25th Floor Los Angeles, CA 90071-2326

MEMORANDUM OF UNDERSTANDING

RELATING TO

THE HANDLING AND TRANSPORT OF MATERIALS

USED OR RECOVERED DURING AN OIL SPILL

BETWEEN THE

DEPARTMENT OF FISH AND GAME'S

OFFICE OF OIL SPILL PREVENTION AND RESPONSE

AND

THE DEPARTMENT OF TOXIC SUBSTANCES CONTROL

WHEREAS, The Administrator of the Office of Oil Spill Prevention and Response within the Department of Fish and Game (hereinafter referred to as OSPR) and the Director of the Department of Toxic Substances Control (hereinafter referred to as DTSC) are interested in developing a pre-approved process for the handling and transport of materials used or recovered during an oil spill response, including materials that may be classified as hazardous waste; and

WHEREAS, Both the Administrator of OSPR and the Director of DTSC share the same goal of minimizing any unnecessary deleterious impacts to the environment, or to the public health and safety; and

WHEREAS, The Administrator of OSPR has the primary authority to direct prevention, removal, abatement, response, containment, and cleanup efforts with regard to all aspects of any oil spill in the marine waters of the State; and

WHEREAS, The Director of DTSC has the primary authority for regulating the handling, transport, recycling, treatment, and disposal of all hazardous waste within the State; and

WHEREAS, Both the Administrator of OSPR and the Director of DTSC are required under State law to establish a process for the handling and transport of materials used or recovered during an oil spill response.

NOW, THEREFORE, the Administrator of OSPR and the Director of DTSC (the Parties) have reached the following Memorandum of Understanding (MOU) and clarification of existing law concerning the handling and transport of materials used, collected, or recovered during an oil spill response.

I. Definitions

The Parties agree that for the purposes of this MOU the following definitions will apply:

a. Emergency Permit

"Emergency permit" means a permit issued by the DTSC in accordance with Title 22, California Code of Regulations, Section 66270.61.

b. Federal On Scene Coordinator

"Federal On Scene Coordinator" means the federal designated representative from the U.S. Coast Guard or the U.S. Environmental Protection Agency who represents the federal government within the Unified Command.

c. Immediate Response

"Immediate response" means the time period when response activities are undertaken that are reasonably necessary to prevent, reduce, or mitigate damages to persons, property, or natural resources of this State due to a threatened or actual spill of oil and/or oily materials.

d. Incident action plan

"Incident action plan" means the document(s) that describe those response activities approved by the Incident Commander or Unified Command.

e. Incident Commander

"Incident Commander" means the state designated representative for coordinating response to oil spills. The Administrator of OSPR or his or her designee is the Incident Commander during a spill and represents the state within the Unified Command.

f. Oil and/or oily materials

"Oil and/or oily materials" means any substance, matter, or medium containing or permeated with any kind of petroleum, liquid hydrocarbons, or petroleum products or any fraction or residues there from, including, but not limited to, crude oil, bunker fuel, gasoline, diesel fuel, aviation fuel, oil sludge, oil refuse, oily water, oil mixed with waste, and liquid distillates from unprocessed natural gas.

g. Orphan spill

"Orphan spill" means a situation where a Responsible Party does not exist, is unknown, or the Responsible Party is unable or unwilling to provide adequate and timely cleanup and/or to pay for the damages resulting from the spill.

h. Response Activities

"Response activities" means those activities that render care, assistance, or advice in accordance with the National Contingency Plan (40 CFR 300 et seq.), the State Oil Spill Contingency Plan, or at the direction of the Incident Commander or Unified Command during an immediate response to a spill or threatened spill of oil and/or oily materials. Response activities are approved in the incident action plan and include for the purposes of this MOU, but are not limited to, separation, recovery, containment, transfer, or transport of oil and/or oily materials to temporary storage sites.

i. Response Area

"Response area" means the area where response activities are occurring or will be occurring as designated and approved by the Incident Commander or Unified Command within the incident action plan. Response area may include, but is not limited to, the location(s) of temporary storage sites and areas associated with a response vessels or other vehicle routes to such sites.

j. Response personnel

"Response personnel" are those individuals or entities performing response activities. Response personnel includes, but is not limited to, all employees, agents, designees, or subcontractors of the Responsible Party, including oil spill cleanup organizations as well as local, state or federal agency employees, volunteer workers, or individuals or entities acting under the direction of the Incident Commander or the Unified Command.

k. Responsible Party

For the purposes of this MOU, "Responsible Party" means any of the following:

(1) The owner or transporter of oil and/or oily materials or a person or entity accepting responsibility for the oil and/or oily materials; or

(2) The owner, operator, or lessee of, or person who charters by demise, any vessel or marine facility; or

(3) A person or entity who, as a shore-based representative of a vessel or facility owner or operator, has full written authority to implement an oil spill contingency plan or otherwise accepts responsibility for the vessel or marine facility.

To the extent permitted by law, oil spill response organizations are not considered a Responsible Party solely due to their performance of response activities authorized in this MOU.

l. Spill or discharge

"Spill" or "discharge" means any release of oil and/or oily materials into or that impacts state waters that is not authorized by any federal, state, or local government entity.

m. Temporary Storage Site

"Temporary storage site" means an area or facility approved by the Incident Commander or Unified Command for characterizing and temporarily storing recovered oil and/or oily materials used, collected, or recovered during an oil spill response. Such an area may include, but is not limited to, permitted or interim status hazardous waste storage facilities, other non-permitted facilities, vessels, barges, tanks, barrels, containers, storage piles, or other appropriate containment methods and locations that may be used to hold recovered oil and/or oily materials. Temporary storage sites need not be owned, operated, or leased by a Responsible Party.

n. Unified Command

"Unified Command" consists of the state Incident Commander, the Federal On Scene Coordinator and the Responsible Party. The Unified Command determines the procedures for directing personnel, facilities, equipment, and communications during the response, containment, and cleanup of an oil spill.

II. Implementation

The Parties agree that:

a. The Director of DTSC will designate individual(s) (hereinafter DTSC representative(s)) in advance or when notified by OSPR, the Office of Emergency Services, or the U.S. Coast Guard that a threatened or actual spill or discharge of oil and/or oily materials has occurred who are authorized to implement and ensure compliance with all terms and conditions of this MOU.

b. The DTSC representative(s) will immediately report to the Incident Commander or Unified Command for assignment where needed and represent the DTSC throughout the response, containment, and cleanup of the spill.

c. The DTSC representative(s) will ensure that all appropriate federal, state, and local agencies are kept informed of potential or actual hazardous waste issues throughout the response and related disposal activities.

d. The Administrator of OSPR agrees to take appropriate efforts to ensure that a Responsible Party reimburses DTSC for all reasonable and necessary response costs incurred and to fund the positions of all reasonably necessary DTSC personnel throughout the duration of an orphan spill.

III. Immediate Response Exemption

The Parties agree that:

a. During an immediate response, all response activities conducted on water within the response area will be exempt from obtaining a hazardous waste facility permit pursuant to section 66270.1(c)(3)(A), Title 22, California Code of Regulations, Division 4.5,and 66263 (hazardous waste manifesting)for treatment or containment activities.

b. Response personnel will use the generator identification number issued for emergency response actions. However, other than the Responsible Party, owners and operators of response equipment, including but not limited to, tanker vessels, barges, or other waterborne craft, vacuum trucks, or other vehicles performing response activities shall not be deemed hazardous waste generators for the purposes of this MOU and shall not require generator identification numbers.

c. During an immediate response all oil and/or oily materials used, collected, or recovered within the response area will be allowed to be expeditiously removed, transferred, or transported to temporary storage sites without uniform hazardous waste manifests.

d. The immediate response exemption created in Article III shall be in effect at all times, for a period of up to thirty (30) days, while oil and/or oily materials are being recovered, transported, or transferred to temporary storage sites for material characterization. Additional thirty (30) day extensions may be granted under appropriate circumstances.

IV . Temporary Storage Sites

The Parties agree that:

a. As soon as practicable once an immediate response has commenced, the Incident Commander or Unified Command will designate or approve temporary storage sites for storing all oil and/or oily materials used, collected, or recovered during a spill response.

b. The Incident Commander will notify DTSC of all designated or approved temporary storage sites, and, to the extent practicable and feasible, will work in conjunction with the DTSC representative(s) and other state and local agencies to avoid any unnecessary deleterious impacts to the environment or threats to the public health and safety when designating or approving temporary storage sites.

c. The Incident Commander will ensure that DTSC representatives have full access to all temporary storage sites to perform all appropriate regulatory activities.

d. Permitted or interim status hazardous waste facilities, or other authorized facilities will obtain an emergency permit from DTSC to modify or necessitate modifying any existing permits issued by DTSC for acting as a temporary storage site. The Responsible Party will be liable for all costs associated with the emergency permit.

f. Oil and/or oily materials stored or otherwise contained at temporary storage sites may not be transferred, transported, treated, disposed, processed, used or re-used, or otherwise utilized until the Incident Commander or Unified Command authorizes such activities. Authorization will not be given until such materials have been characterized (as described in Article V.), and a volumetric determination of the amount of such materials recovered has been made or approved by the Incident Commander.

V. Material Characterization

The Parties agree that:

a. Once the oil and/or oily materials have been contained at the temporary storage site, the Responsible Party, or, in the event of an orphan spill, the Incident Commander in conjunction with DTSC, must expeditiously determine:

(1) Those materials that are capable of being processed, used or re-used, or otherwise utilized as an ingredient in the manufacture of petroleum products or other products and therefore not a waste or hazardous waste; or

(2) Those materials that are waste but are nonhazardous waste; or

(3) Those materials that are hazardous waste.

b. Materials capable of being processed, used or re-used, or otherwise utilized as an ingredient in the manufacture of petroleum products or other products will be expeditiously transported to any facility that is otherwise authorized during non-spills to perform such activities. Facilities performing such activities will obtain emergency permits from DTSC before processing, using or re-using, or utilizing such materials. The Responsible Party will be liable for all costs associated with the emergency permit.

c. Recovered oil and/or oily materials deemed a waste by the Responsible Party, or by DTSC, must undergo chemical waste characterization as provided in Title 22, California Code of Regulations, sections 66264.13 and 66265.13, to determine whether the materials recovered are hazardous waste.

d. Materials characterized as hazardous waste after undergoing characterization will be managed in accordance with all applicable statutes, regulations, or permits prior to and during transfer, or transport to a hazardous waste management facility.

e. Notwithstanding V.(a)-(d) or any other provision of law, debris that is contaminated only with petroleum or any of its fractions is exempt from regulation under Chapter 6.5, of Division 20 of the Health and Safety Code if all of the following conditions are met:

(1) The debris consists exclusively of wood, paper, textile materials, concrete rubble, metallic objects, or other solid manufactured objects.

(2) The debris is not subject to regulation as a hazardous waste under the federal act.

(3) The debris does not contain any free liquids, as determined by the paint filter test specified in the regulations adopted by the department.

(4) The debris is disposed of in a composite lined portion of a waste management unit which is classified as either a Class I or Class II landfill in accordance with Article 3 (commencing with Section 2530) of Chapter 15 of Division 3 of Title 23 of the California Code of Regulations, the disposal is made in accordance with the applicable requirements of the California regional water quality control board and the California Integrated Waste Management Board, and, if the waste management unit is a Class II landfill, it is sited, designed, constructed, and operated in accordance with the minimum standards applicable on or after October 9, 1993, to new or expanded municipal solid waste landfills, which are contained in Part 258 (commencing with Section 258.1) of Subchapter I of Chapter 1 of Title 40 of the Code of Federal Regulations, as those regulations read on January 1, 1996.

VI. Emergency Permit

The Parties agree that:

a. Once oil and/or oily materials have been deemed hazardous waste at the temporary storage site(s), the DTSC representative will expeditiously determine if the storage of such materials creates an imminent and substantial endangerment to human health or the environment.

b. If such determination is made, the DTSC representative will immediately issue an emergency permit to the Responsible Party, or to the Incident Commander in the event of an orphan spill, for the temporary storage site(s).

c. The emergency permit will thereafter be valid throughout the duration of the response activities but in no case in excess of ninety (90) days unless extended in writing by DTSC pursuant to Title 22, California Code of Regulations, Section 66270.61.

d. The emergency permit shall allow all response personnel to expeditiously perform all other response activities (within the scope of DTSC's authority) that are reasonably necessary to prevent, reduce, or mitigate damages to persons, property, or natural resources of this State including transfer, treatment, storage, resource recovery, or disposal of materials used, collected, or recovered during the oil spill response.

VII. Miscellaneous

The Parties agree that:

a. The terms of this MOU may be changed at any time by the mutual consent of both Parties by a written, signed amendment hereto.

b. In the event that individual and severable portions of this MOU are found to be in conflict with either State or Federal law, regulations or policies, and, therefore, of no effect, the MOU will remain in effect without those provisions unless either party notifies the other in writing that the entire MOU is terminated.

c. Any action to modify, amend, or terminate this MOU may only be taken by the Administrator of OSPR and the Director of DTSC, or persons to whom this authority is specifically delegated by them.

FOR THE OFFICE OF OIL SPILL PREVENTION AND RESPONSE:

FOR THE DEPARTMENT OF TOXIC SUBSTANCES CONTROL:

Pete Bontadelli
Administrator

Jesse Huff
Director

FOR THE DEPARTMENT OF FISH
AND GAME:

Jacqueline E. Schafer
Director

**9510.4 LOA among U.S. Coast Guard (USCG), Environmental Protection Agency (USEPA), National Oceanic and Atmospheric Administration (NOAA), and Department of Interior (USDOI) Concerning the use of in-situ burning as a response method to oil pollution for the area 35-200 nautical miles off the coast of California—Signed 10 April 1997.***

(also see Section 4550)

ISB LOA for RIX-Mainland, April 1997

LETTER OF AGREEMENT

AMONG

US COAST GUARD (USCG),

U S ENVIRONMENTAL PROTECTION AGENCY (USEPA),

US DEPARTMENT OF COMMERCE,

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA),

AND

US DEPARTMENT OF THE INTERIOR

CONCERNING THE USE OF IN-SITU BURNING AS A

RESPONSE METHOD TO OIL POLLUTION

FOR THE AREA 35-200 NAUTICAL MILES OFF THE CALIFORNIA COAST

For MOU see section 3270.3 In-Situ Burn Decision Guidelines.

**9510.5 MOU between U.S. Coast Guard and the Environmental Protection Agency -- Signed 4 January 1982**

**9510.6 MOU between the Departments of Interior and Transportation concerning respective responsibilities under the National Oil and Hazardous Substances Pollution Contingency Plan -- Signed 16 August 1971**

**9510.7 Interagency Agreement (IAA) between the U.S. Fish and Wildlife Service and the U.S. Coast Guard for participation in pollution incidents -- Signed 24 July 1979**

**9510.8 Instrument of re-delegation of Sections 2(d), 2(f), 2(g), 3(a), and 4(b) of Executive Order 12316 of October 2, 1981 from the U.S. Coast Guard to the Environmental Protection Agency on response actions.**

**9510.9 Interagency Agreement (IAA) between the United States Navy and the United States Coast Guard for cooperation in oil spill clean-up operations and salvage operations -- Signed 15 September 1980**

**9510.10 MOU among the National Institute for Occupational Safety and Health, the Occupational Safety and Health Administration, the United States Coast Guard and the United States Environmental Protection Agency – Signed 18 December 1980**

**9510.11 MOU between the Minerals Management Service of the Department of the Interior and the United States Coast Guard of the Department of Transportation concerning regulation activities and facilities on the Outer Continental Shelf of the United States -- Signed 29 August 1989**

**9510.12 MOU between the Environmental Protection Agency and the United States Coast Guard concerning the mitigating of damage to the public health or welfare caused by a discharge of a hazardous substance under Section 311 of the Clean Water Act (33 USC 1321) -- Signed 3 October 1979**

**9510.13 MOU between the Environmental Protection Agency and the United States Coast Guard on assessment of civil penalties for discharges of oil and designated hazardous substances -- Signed 17 August 1979**

**9510.14 MOU between the Department of Transportation and the Department of the Interior regarding offshore pipelines -- Signed 6 May 1976**

**9510.15 MOU between the Department of Transportation, Department of Interior and the Environmental Protection Agency regarding jurisdictional responsibilities for offshore facilities -- Signed 14 December 1993**

**9510.16 MOU between the California Department of Fish and Game's Office of Oil Spill Prevention and Response and the California State Lands Commission.**

**9510.17 MOU between the California Department of Fish and Game and California Department of Forestry and Fire Protection.**

### 9510.18 MOA on oil spill prevention and response between Wildlife Protection Division and Office of Oil Spill Prevention and Response.

## *9600* Conversions

Refer to Appendix XXXI of the REGIONAL CONTINGENCY PLAN.

## *9700* List of Response References

Refer to Section 4015.01 of the REGIONAL CONTINGENCY PLAN.

### 9710 Relevant Statute/Regulations/Authorities List

Most of the references listed can be found in Section 1002 of the REGIONAL CONTINGENCY PLAN.

INCIDENT MANAGEMENT HANDBOOK ( http://www.uscg.mil/hq/g-m/mor/page1lang.htm ) (IMH) , U.S. Coast Guard

National Incident Management System (NIMS) Incident Command System (ICS); Dept. of Homeland Security.

33 CFR

COMDTINST 16000.6, Coast Guard Marine Safety Manual, Vol. 1

COMDTINST 16000.8, Coast Guard Marine Safety Manual, Vol. 3

COMDTINST 16000.9, Coast Guard Marine Safety Manual, Vol. 4

COMDTINST 16000.10, Coast Guard Marine Safety Manual, Vol. 5

COMDTINST 16000.11, Coast Guard Marine Safety Manual, Vol. 6

COMDTINST 16000.15, Coast Guard Marine Safety Manual, Vol. 10

COMDTINST 16465.1, Spills Of National Significance Response Management System, 15 July 1997

COMDTINST 16471.1 Adoption of NIIMS ICS, 9 Feb 1996

COMDTINST 16471.2, Incident Command System Implementation Plan, 23 May 1997

### 9720 Relevant Instructions/Guidelines/ Standard Procedures and Practices List

Appendix IX of the REGIONAL CONTINGENCY PLAN.

National Response Plan

National Contingency Plan (40 CFR Part 300)

Open-Water Oil Identification Job Aid

Shoreline Assessment Job Aid

Shoreline Assessment Manual

Arial Observation of Oil at Sea

Dispersant Application

An Introduction to Coastal Habitats and Biological Resources for Spill Response

Mechanical Protection Guidelines

Shoreline Countermeasures Manual

SMART

### 9730 Geographic Response Plans and Ecological Risk Assessments

Refer to Section 9800 of this Plan for more information

#### 9730.1 Santa Barbara Ecological Risk Assessment

### 9740 Technical References List

Refer to Section 4015.02 of the REGIONAL CONTINGENCY PLAN.

## *9800* Site Specific Information

9800 Sensitive Site Summary and Strategy Information Introduction The essence of spill response contingency planning is the identification and protection of environmental, cultural, and economic resources at risk. These in combination with geographic constraints that impact spill response measures at the respective locales define the response need. This section of the ACP addresses both the sensitive locales identified by the respective area committees and the geographic as well as access issues, which may significantly effect response decisions. Section 9800 provides geographically organized information about ecologic, cultural/historic, economic, and other significant resources that may be at risk from spills. The information is grouped by Geographic Response Areas (GRAs). In some instances, the GRAs fall along political boundaries such as county lines, but emphasis is given to local hydro-geographic areas, where contaminants such as oil are likely to circulate. 9810 LA/LB North The LA/LB North area includes San Luis Obispo, Santa Barbara, and Ventura Counties and the Channel Islands. Below is the outline describing the organization of section 9800 for the LA/LB North area. In this area, the GRA's fall along county lines except for the Channel Islands (San Miguel, Santa Rosa, Santa Cruz and Anacapa) which are grouped in their own GRA due to access and response limitations.

**California Strategy Concepts, Systems Approach, and Nomenclature**

**Glossary of Acronyms and Nomenclature Used in Strategies**

### 9810 Northern Sector - ACP 4

The LA/LB North area includes San Luis Obispo, Santa Barbara, and Ventura Counties and the Channel Islands. Below is the outline describing the organization of section 9800 for the LA/LB North area. In this area, the GRA's fall along county lines except for the Channel Islands (San Miguel, Santa Rosa, Santa Cruz and Anacapa) which are grouped in their own GRA due to access and response limitations.

### 9811 San Luis Obispo County

**9811.1** Sensitive Sites
**9811.2** Cultural& other resources at risk
**9811.3** Economic Sites
**9811.4** Operational Divisions
**9811.5** Shoreline Access

**9812 Santa Barbara County**

**9812.1** Sensitive Sites
**9812.2** Cultural and Other Resources at Risk
**9812.3** Economic Sites
**9812.4** Operational Divisions
**9812.5** Shoreline Access

**9813 Ventura County**

**9813.1** Sensitive Sites
**9813.2** Cultural and Other Resources at Risk
**9813.3** Economic Sites
**9813.4** Operational Divisions
**9813.5** Shoreline Access

**9814** Channel Islands

**9814.1** Sensitive Sites
**9814.2** Cultural and Other Resources at Risk
**9814.3** Economic Sites
**9814.4** Operational Divisions
**9814.5** Shoreline Access

**9820 Reserved**

**9830 Reserved**

**9840 Southern Sector - ACP 5**

The LA/LB South area includes Los Angeles and Orange Counties and the Southern Channel Islands. Below is the outline describing the organization of section 9800 for the LA/LB South area. In this area, the GRA's are grouped by county and then further sub-divided within the county as needed based on hydro-geographical boundaries. The Southern Channel Islands are the exception as they have multi-county jurisdiction and due to access and response limitations they are grouped in their own GRA within the Los Angeles County GRA grouping

**9841 Los Angeles County**

**9841.1 Sensitive Site Summary and Strategy Sheet**

**9841.2 Historical and Cultural Sensitive Areas**

**9841.3 Economically Sensitive Areas**

**9841.4 Coastal Operational Divisions**

**9841.5 Shoreline Access**

**9842 Orange County**

**9842.1 Sensitive Site Summary and Strategy Sheet**

**9842.2 Historical and Cultural Sensitive Areas**

**9842.3 Economically Sensitive Areas**

**9842.4 Coastal Operational Divisions**

**9842.5 Shoreline Access**

Additional information may be drawn from:

Ecological Sensitivity Atlases for the California Coast – CA Dept. of Fish and Game and NOAA

Rare Find Database - CA Dept of Fish and Game - endangered species both Federal and State listed species

Wildlife Habitats Relational Database – CA Dept of Fish and Game – species associated with habitat types

CHRIS – a database of identified cultural and historic properties – State Historic Preservation Officer, CA Dept of Parks and Recreations

***9900* Reserved for Area/District**